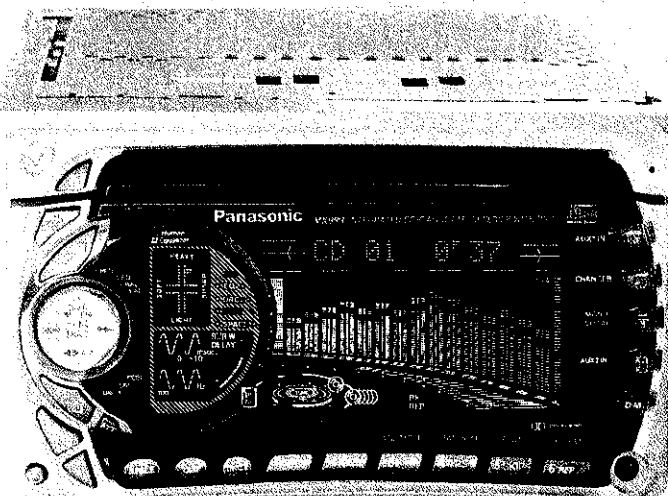# Operating Instructions
操作說明書

INTEGRATED CD/CASSETTE RECEIVER WITH DSP
收音／CD／放音組合機

CQ-VX999EW

Panasonic®
松下电器

Before operating this set, please read these instructions completely.
操作本裝置之前，請熟讀這些說明。

Contents

目錄

Panasonic welcomes you to their constantly growing family of electronic products owners.
We endeavor to give you the advantages of precise electronic and mechanical engineering, manufactured with carefully selected components, and assembled by people who are proud of the reputation their work has built for our company. We know this product will bring you many hours of enjoyment, and after you discover the quality, value and reliability we have built into it, you too will be proud to be a member of our family.

Precautions

Volume Level
For your driving safety, keep the volume level low enough to be aware of road and traffic conditions.

Car Washing
To avoid electrical shorts which may cause fire or other damage, do not expose this equipment (including the speakers and tape) to water or excessive moisture.

Car Ventilation
If your car is parked for several hours in direct sunlight, the temperature inside the car may become very high. It is advisable to drive the car and give the interior a chance to cool down before switching the unit on.

Power Supply
This equipment is designed to be used in a car having 12-Volt negative ground battery system.

Tape Mechanism
Keep magnets, screwdrivers and other metallic objects away from the tape mechanism and tape head.

Disc Mechanism
Do not insert coins or any small objects. Keep screwdrivers and other metallic objects away from the disc mechanism and disc.

Service
This unit is made of precision parts. Do not attempt to disassemble or adjust any parts. For repair, please consult your nearest authorized Panasonic Service Center.

About Preset Memory
The preset memory is cleared to return to the original factory setting when the power connector or battery is disconnected.
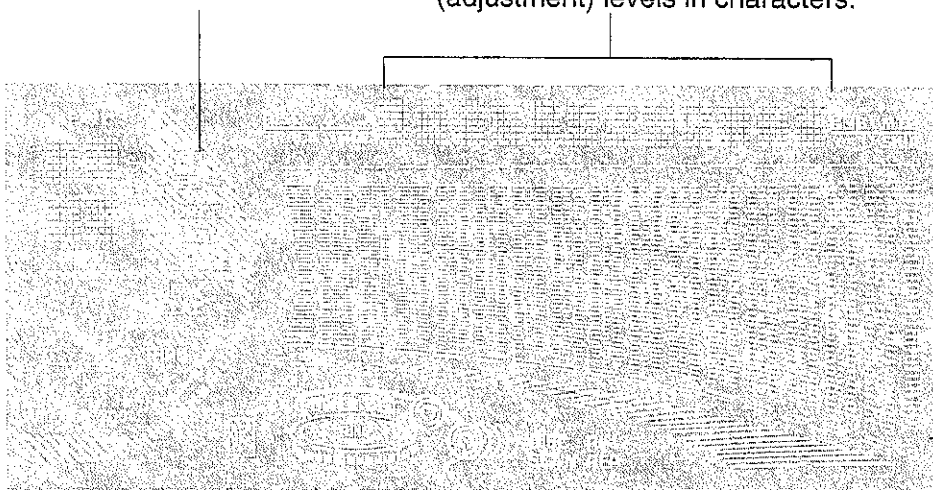
OPERATION: GENERAL

■ Display

(CD button)

(CD changer button)

(Tuner button)

(Tape button)

D • M button

Sensor
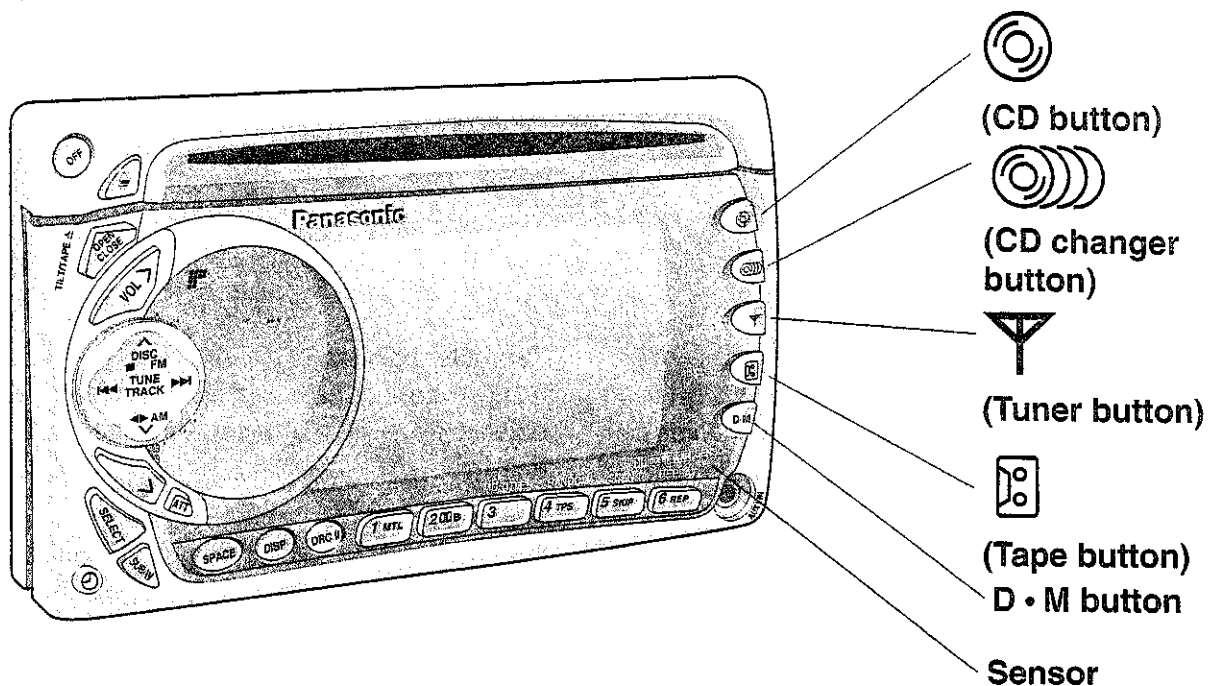
ATT (attenuator) indicator
Flashes when ATT is turned on.

Dot indicator
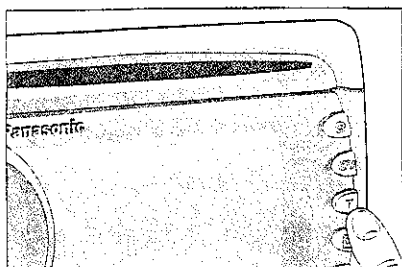Displays the present function and set (adjustment) levels in characters.

Standby indicators

Spectrum Analyzer indicators

: Lights inside when an Tape is in.

: Lights inside when a CD is in.

: Lights inside when the magazine is in the changer.

4

Starting Operation / Power

① Turn the ACC switch of your car to ON.
② Press any of Ⴑ (TUNER), ◎ (CD), ▣ (TAPE), ◎))) (CH • C) or D • M, and your unit is switched on.

Note:
When you are using your unit for the first time, the demonstration mode pattern is displayed. The display may remain unchanged when the above buttons are pressed. In such a case, press DISP to release demonstration mode.

Caution:
● If there is any obstacle above the mounting position in your car, set your unit at HALF 1, HALF 2 or HALF 3 as shown at left.
● The front panel is originally set to the position (FULL OPEN).
● See page 40 for how to set the front panel to lift-up position.

FULL
OPEN
HALF3
HALF2
HALF1
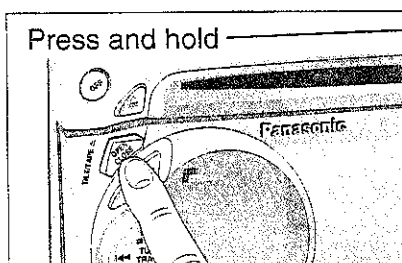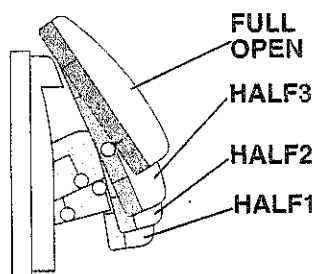
Press and hold

Front Panel Angle Adjustment (Tilt)

● The front panel can be adjusted to a desired angle for easy display viewing or easy button operation.
● The front panel angle changes in 3 steps each time press and hold TILT for more than 0.5 second as shown at left.
● Even after turning off the power, the last TILT angle is memorized.

TILT MOVEMENT
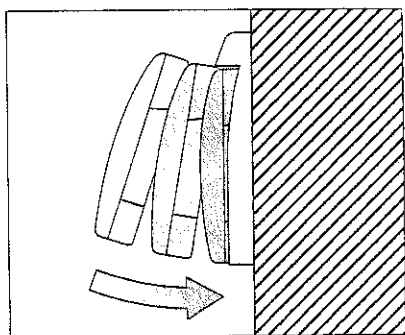
Note:
● When the engine is turned off, the front panel is automatically fully closed.
● The front panel goes down if a button on it, for example, is pushed hard after adjusting the angle. It automatically returns to the original position after that.

Caution:
● Never put your hand or finger inside while the front panel is opening or closing. This is important to avoid injuries.
● Never push or pull the front panel, or expose it to shock while it is opening or closing, or when it is up highest. This is important to avoid trouble.
● Do not place anything on the front panel while it is opening or closing, or when it is up highest.

CQ-VX999EW
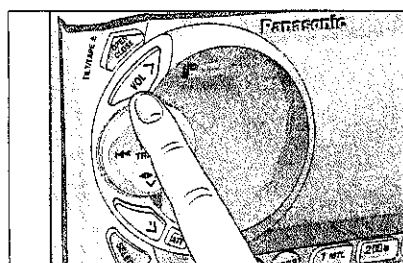
5

OPERATION: GENERAL (Continued)
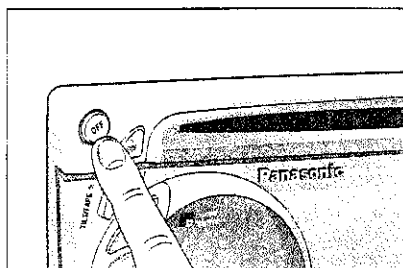
Switching Power Off

● Press OFF to switch off the power.

● Press OFF each time after turning power off, the clock display is turned on and off alternately.

> **Note:**
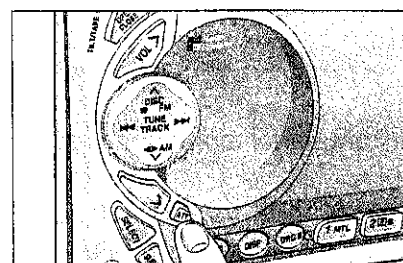> The clock display remains off if the clock has not been adjusted. (See page 36.)

Volume Control

Press ∧ VOL or ∨ to increase or decrease the volume.

0 to 40

> **Note:**
> Volume can be adjusted in each of the operating modes except in Navi Mute mode with the optional navigation system connected. (See page 39.)

Attenuator

Press ATT to decrease the volume to about 1/10 of the previous level.

Press ATT again to cancel.

> **Note:**
> ATT cannot be used in Navi Mute mode. (See page 39.)

CQ-VX999EW

Sound Control

■ Sound Control Display

SUB • W:
Lights when the preout is set to sub-woofer.

DRC II indicator:
Lights when DRC II (dynamic road noise control) is set.

EQ (equalizer) indicator:
Lights when the equalizer is set (or flashes during adjustment).

POSI (seat position) indicator:
Lights when the seat position is set.

SPACE indicator:
Lights when a sound effect is set.

THRU:
Lights when the preout is set to THRU.

DELAY:
Lights when a delay time is set for SUB • W output.

Tone Quality Adjustment

Press SELECT to switch tone quality in sequence as follows.

Normal mode → HUMAN EQ → GRAPHIC EQ → BAL//FAD
↑   ↓
DRCII SELECT ← SUPER BASS ← POSITION SEL

Note:
When a setting mode is selected but no operation is made within 5 seconds, the display will return to the normal mode. In such a case, press SELECT again and repeat the setting procedure.

OPERATION: GENERAL (Continued)

Tone Quality Setting / HEQ (Human Equalizer)

- Unlike GEQ (graphic equalizer) which is for adjusting the tone quality of each frequency band, HEQ offers a revolutionary function which enables you to select a heavy, light, sharp, or soft tone as desired.
- Select your favorite tone, referring the Human Equalizer Positioning Image diagram as follows.
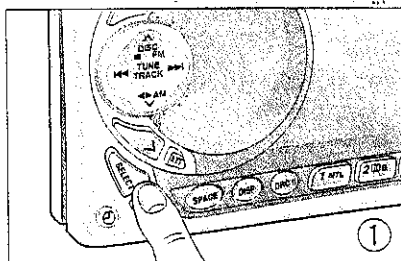
① Press SELECT to select HEQ. The HEQ indicator blinks.
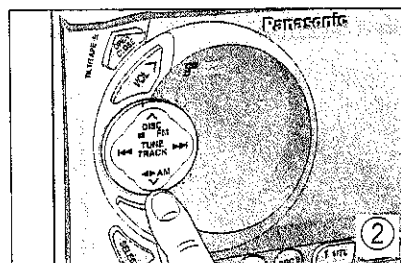
② Setting a Tone Quality
With the center fixed flat, any of the 49 equalizer patterns, arranged in vertical and horizontal directions, can be selected.

Press ∧ to select heavy bass sound
: Changes to heavy bass.
Press ∨ to select light bass sound
: Changes to light bass.
Press ►►| to select sharp treble sound
: Changes to sharp treble.
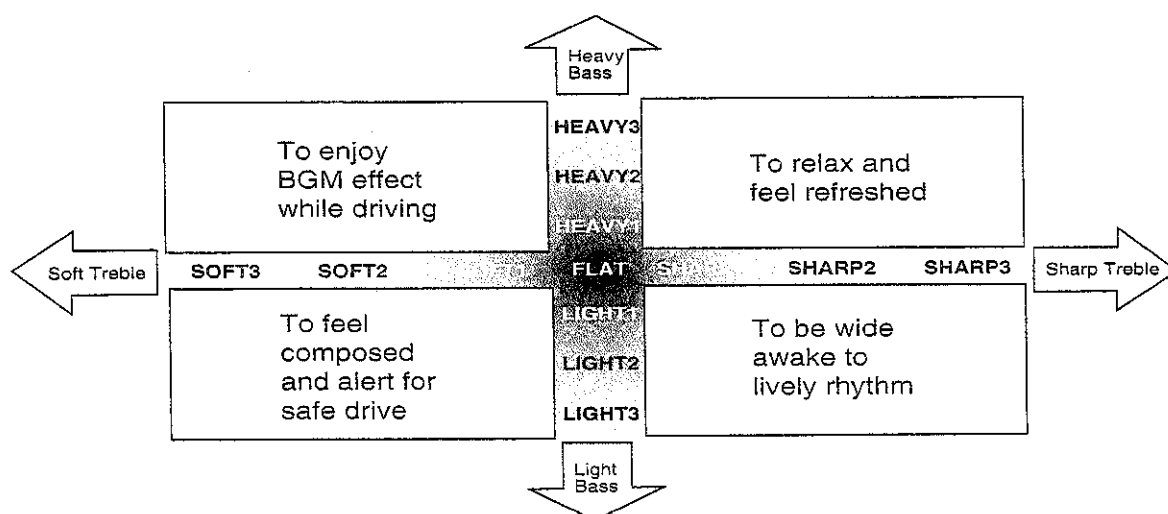Press |◄◄ to select soft treble sound
: Changes to soft treble.

■ Human Equalizer Position Image

You can select a tone quality suiting with your feeling among 49 patterns. (HEQ default : FLAT)

Center   : Flat
Vertical axis   : Heavy and light components of sound (mainly bass)
Horizontal axis : Sharp and soft components of sound (mainly treble)

Heavy Bass

	HEAVY3			
To enjoy BGM effect while driving	HEAVY2	To relax and feel refreshed		
	HEAVY1			
Soft Treble	SOFT3	SOFT2	SOFT1	FLAT	SHARP1	SHARP2	SHARP3	Sharp Treble
	LIGHT1			
To feel composed and alert for safe drive	LIGHT2	To be wide awake to lively rhythm		
	LIGHT3			

Light Bass

CQ-VX999EW

■ Human Equalizer Display

Setting display:
A set tone quality pattern is displayed in characters.
(A set frequency is displayed in case of GEQ.)
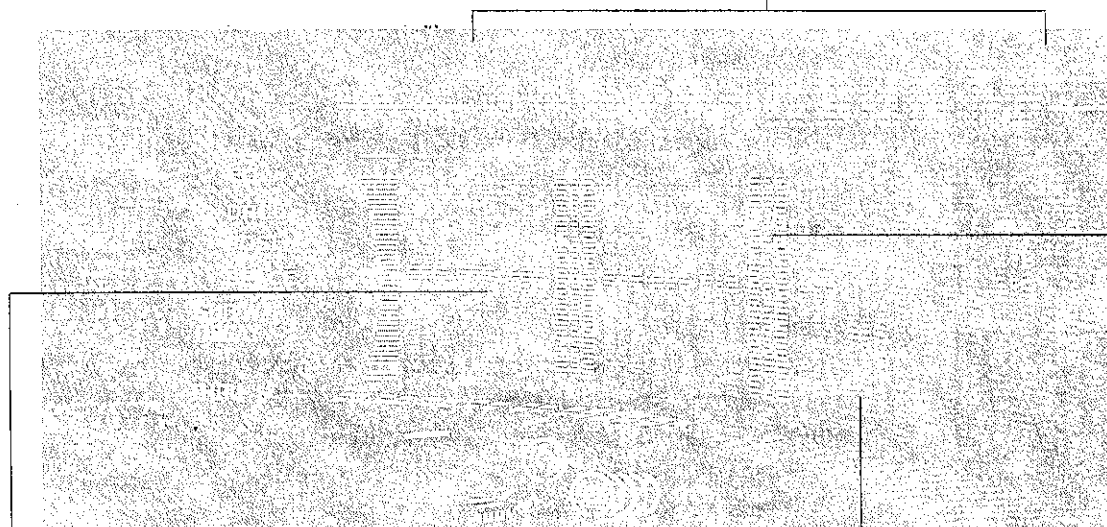
Sectional
display

Tone quality (HEQ) adjustment table
The cursor blinks at the set tone quality
(current HEQ mode) position.
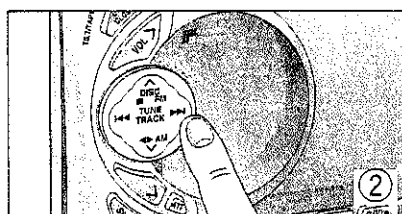
Equalizer characteristic result display
The equalizer curve corresponding to the cursor
position is displayed in the right half.
(7 bands x ±10dB)
(Full display in case of GEQ)

OPERATION: GENERAL (Continued)

Sound Range and Level Setting/GEQ (Graphic Equalizer)
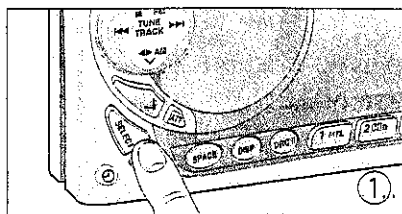
① Press SELECT to select GEQ mode.

② Selecting a frequency
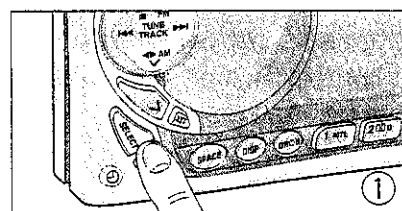Press ►►I to switch the flashing cursor to change the sound range as follows.

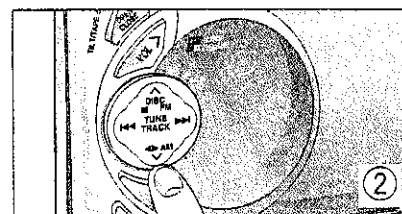$$80 \rightarrow 160 \rightarrow 320 \rightarrow 640 \rightarrow 1.6\text{ k} \rightarrow 4\text{ k} \rightarrow 10\text{ k (Hz)}$$

(I◄◄ : opposite direction)
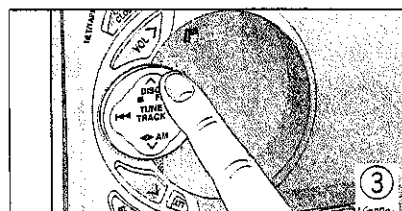
③ Adjusting the level
The level is 0 dB when the cursor is at the center. Any of the 13 levels can be selected from +12 dB to –12 dB.
(GEQ default : 0 dB for each frequency)
Press ∧ to raise the level.
Press ∨ to lower the level.

GEQ in the Memory

① Press SELECT to select GEQ mode.

② Select a frequency, adjust the level and set the GEQ.
(See steps ② and ③ above.)
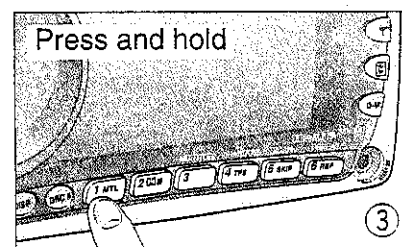
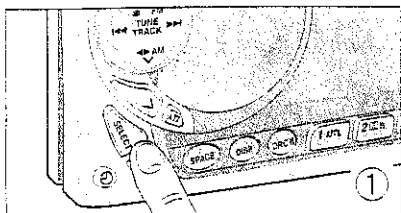③ Press and hold one of the preset buttons 1 to 6 for more than 2 seconds until the display blinks.

Preset number

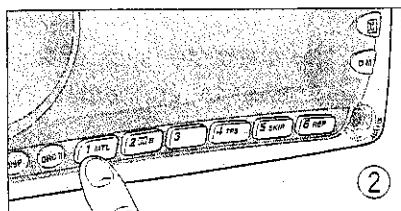Press and hold

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Note:
If a preset button once programmed in the memory is preset again, the GEQ saved in the memory is erased.

10

CQ-VX999EW

Listening to a Desired Selected Sound/Recalling GEQ Memory

① Press SELECT to select GEQ mode.
② Press one of the buttons (1 to 6) to recall the desired GEQ.
The GEQ preset display appears.

Balance and Fader Adjustment

① Press SELECT to select BAL//FAD mode.

② BAL Adjustment
Press ►►► to increase the sound volume from the right speakers.
Press ►◄◄ to increase the sound volume from the left speakers.

FAD Adjustment
Press ∧ to increase the sound volume from the front speakers.
Press ∨ to increase the sound volume from the rear speakers.
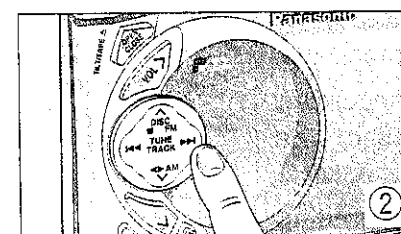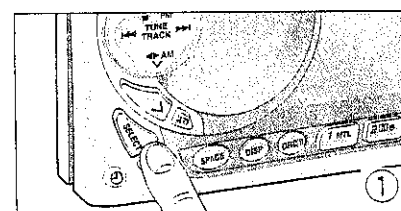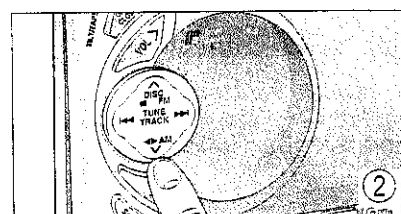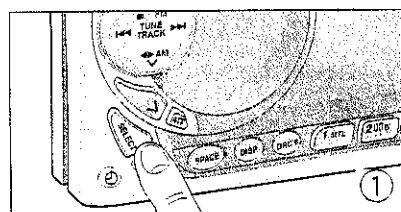
Changing Listening Position/ Seat Position Change

The seat position function reproduces a sound image ideal to the listener according to his or her place in the car.
① Press SELECT to select POSITION SEL mode.
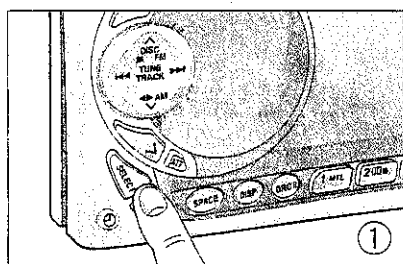② Press ►►► to switch the position in sequence as follows.
(Seat position default : OFF)

OFF → Front right → Front left

Rear ← Front
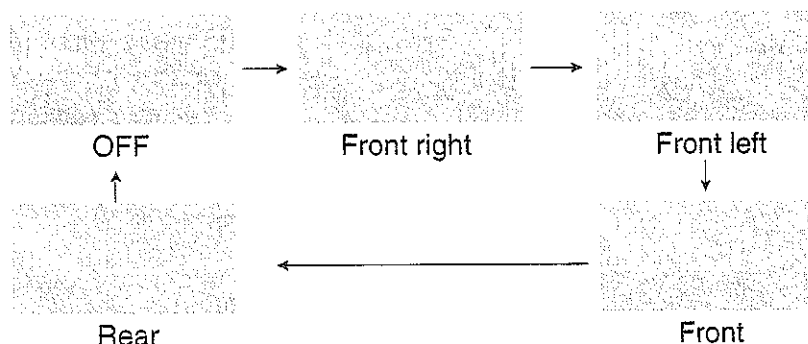
(►◄◄ : opposite direction)

OPERATION: GENERAL (Continued)

Bass Emphasis/SBC (Super Bass Control)

The SBC function reinforces the bass range to suit the speaker characteristics.

 ● It is set to the rear speaker output, and permits selection of any of the three positions depending on the type of speakers installed. (See the table below.) These characteristics are so set as to be best suited particularly to the recommended speakers, but are subject to change in acoustic effects depending on the type of car and the speakers' positions.

 ● Referring to the characteristics of each type of speaker, set SBC as suited to the characteristics of the type of speakers used. In case of the SBC-SW type, the system can be upgraded by connecting a desired sub-woofer to the special sub-woofer output to create a front-oriented sound.
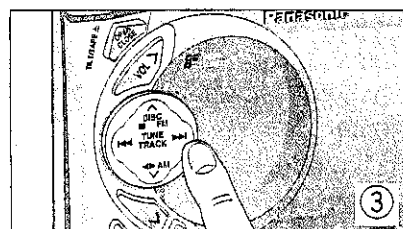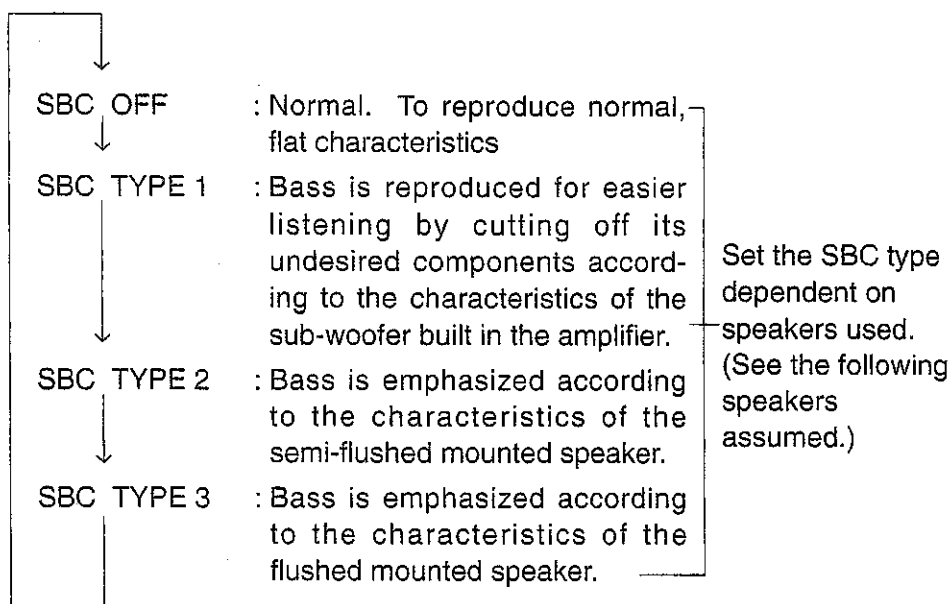
Setting a SBC Type

① Press SELECT to select SBC mode.
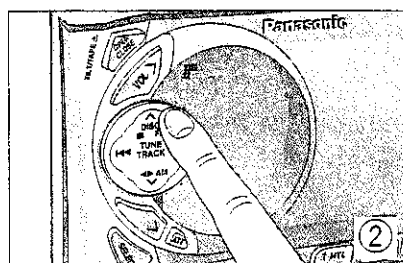
② Press ∧ to set SBC.
(When "SBC" is not displayed.)

③ Setting a type
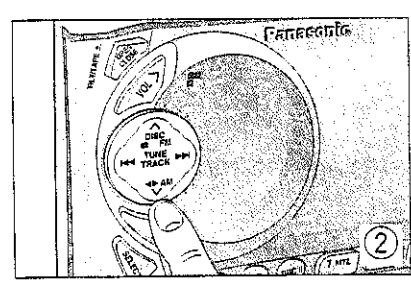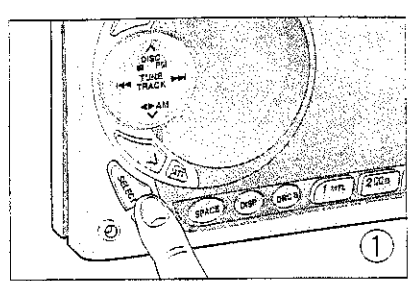Press ▶▶I to switch the SBC type in sequence as follows.
(SBC default : SBC OFF)

SBC OFF	: Normal. To reproduce normal, flat characteristics	
SBC TYPE 1	: Bass is reproduced for easier listening by cutting off its undesired components according to the characteristics of the sub-woofer built in the amplifier.	Set the SBC type dependent on speakers used. (See the following speakers assumed.)
SBC TYPE 2	: Bass is emphasized according to the characteristics of the semi-flushed mounted speaker.	
SBC TYPE 3	: Bass is emphasized according to the characteristics of the flushed mounted speaker.	

(I◀◀ : opposite direction)

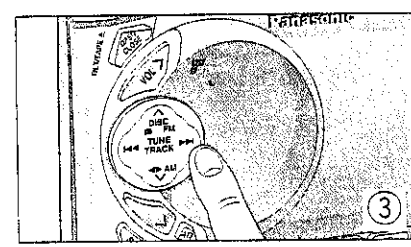| SBC Display	Speaker Assumed
SBC TYPE1	Semi-flush mounted speaker
SBC TYPE2	
SBC TYPE3	Flush mounted speaker

12

CQ-VX999EW

Setting the SBC Types
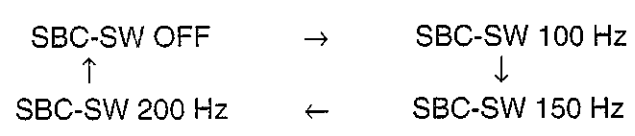
(In this case, the rear speakers will be in monaural mode.)
① Press SELECT to select SBC mode.

② Press ∨ to select SBC-SW.
(When "SBC-SW" is not displayed.)

③ Setting a type
Press ▶▶I to switch the SBC frequency in sequence as follows.
(SBC default : SBC-SW OFF)

SBC-SW OFF   →   SBC-SW 100 Hz
↑   ↓
SBC-SW 200 Hz   ←   SBC-SW 150 Hz

(I◀◀ : opposite direction)

| SBC-SW Display	Bass Cutoff Frequency
SBC-SW 100Hz	100Hz
SBC-SW 150Hz	150Hz
SBC-SW 200Hz	200Hz

Note:
● Rear speaker sound is monaural output.
● When the preout is set to SUB ● W, the delay time to emphasize the speaker bass can be adjusted.
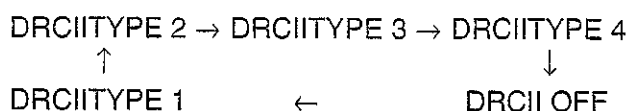(See page 18.)

CQ-VX999EW

OPERATION: GENERAL (Continued)

Dynamic Road Noise Control Setting/DRC II

The DRC II function corrects noise inside the car as appropriate to the running condition of it to let you enjoy listening.
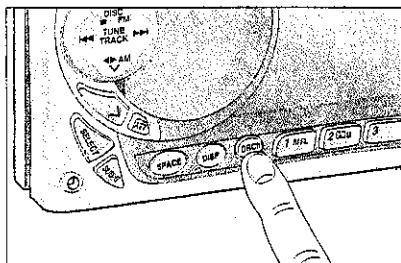
Press DRC II to switch the DRC II type in sequence as follows.
(DRC II default : DRC II TYPE 2)

DRCIITYPE 2 → DRCIITYPE 3 → DRCIITYPE 4
↑   ↓
DRCIITYPE 1   ←   DRCII OFF

The correction level increases starting with TYPE 1. Select a position as desired referring to the table below.

| Model	Description	Characteristics
TYPE1	Town drive	DRC curve ①, compressor OFF
TYPE2	Highway drive	DRC curve ②, compressor OFF
TYPE3	Music in low volume in town drive	DRC curve ①, compressor ON
TYPE4	Music in low volume in highway drive	DRC curve ②, compressor ON

The DRC II curve changes in the pattern ① or ② as follows:
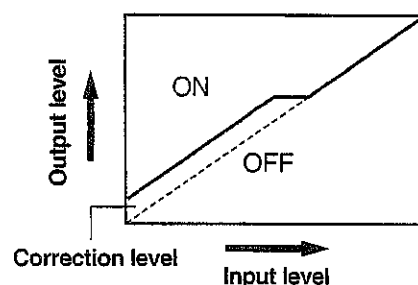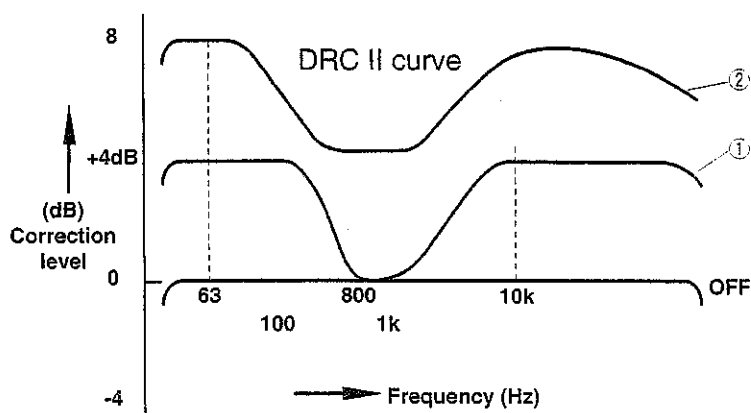
The compressor corrects low-level music signals to a level for easy listening.

CQ-VX999EW

Sound Field Effect Setting/SPACE

A sound field effect can be set for each of the AM, FM, CD, TAPE, CH-C, AUX1 and AUX2 modes.
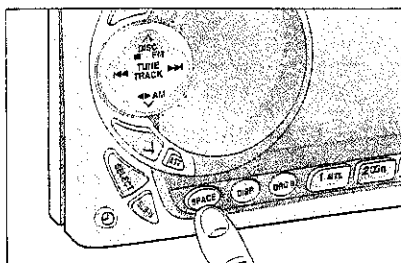
Press SPACE to switch the Sound Field Effect in sequence as follows.
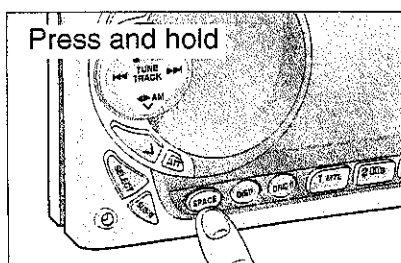(SPACE default : SPACE OFF)

SPACE OFF → LIVE HOUSE → CONCERT HALL → JAZZ CLUB
↑   ↓
CINEMA ← VOCAL ← DISCO ← STADIUM

Note:
SPACE effect is OFF during saving in the Direct Memory. (See page 37.)

Desired Space Display/SPACE Indicator
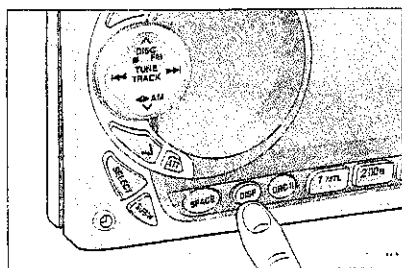
To display the Sound Field Effect currently set by an icon:

Press and hold

① Press and hold SPACE for more than 2 seconds.

② The current SPACE indicator is shown by an icon.

③ Press and hold SPACE for more than 2 seconds to switch the icon as follows:

Example:
SHARP2 HEAVY2

Example:
JAZZ

Example:
**CD mode**
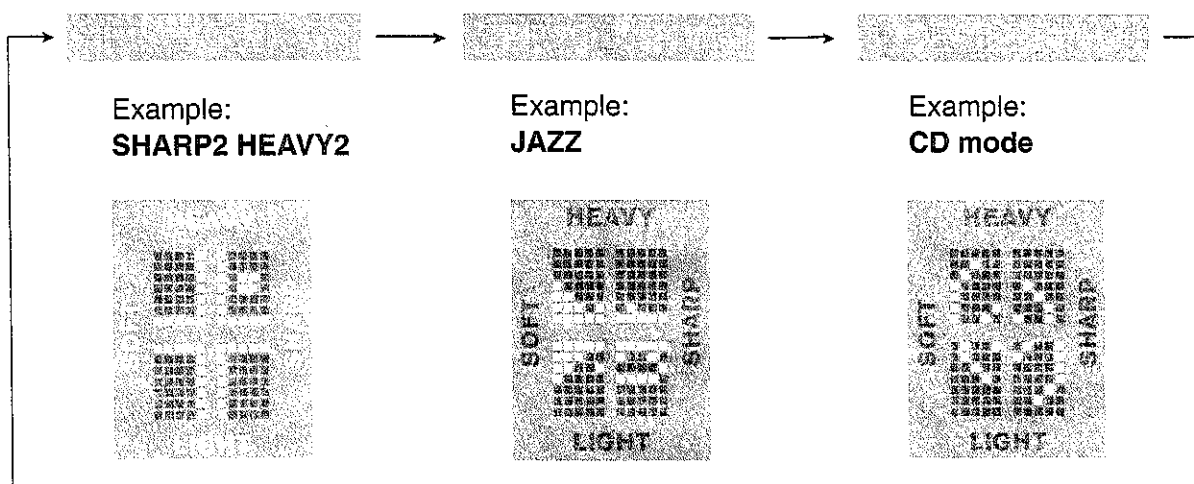
OPERATION: GENERAL (Continued)
Switching Spectrum Analyzer Display

Press DISP to switch the spectrum analyzer display in the 16 patterns including DEMO mode in sequence as follows.

> **Note:**
> DEMO mode is initially displayed. There may be cases where the buttons cannot be operated in DEMO mode. If so, change the spectrum analyzer display to other than DEMO mode.

DEMO MODE
↓
↓
↓
↓
↓
↓
↓
↓
↓
↓
↓
↓
↓
↓

CQ-VX999EW
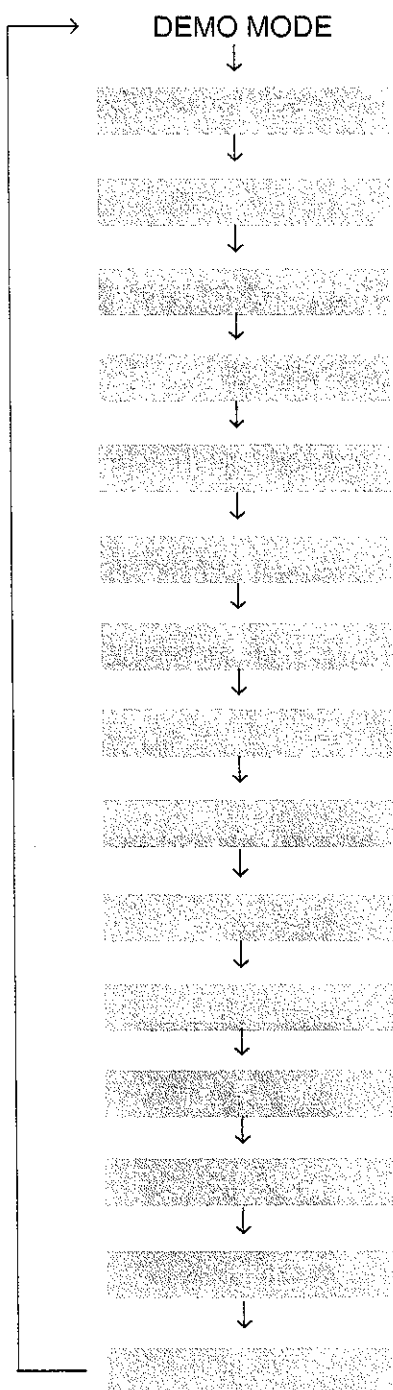
Preout (External Output) Switching

Connect an optional power amplifier (CY-M9054EN, for example) and set it to suit your system.
Your unit has a preout for rear output and another for sub-woofer/front/rear output. The operating procedures for the possible setting of preout (sub-woofer/front/rear) outputs are described in this section.
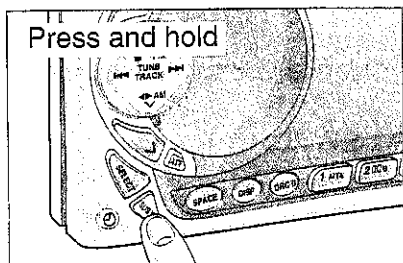
Press and hold

Press and hold SUB • W for more than 2 seconds to switch the output mode as follows:
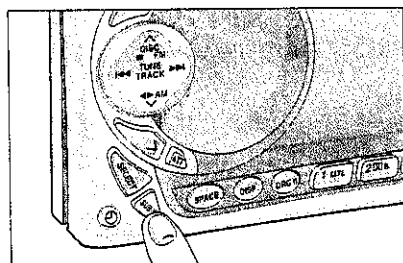(Preout default : SUB • W)

PREOUT SUB • W (Sub-woofer output)	: In case of connecting sub-woofers that emphasize bass: Volume level, delay time adjustment, and cutoff frequency can be set.
↕	
PREOUT THRU (Through output)	: In case of connecting speakers for normal system upgrading: Volume level adjustment and front/rear switching can be made.

Preout Output Volume Adjustment (common to SUB • W and THRU)

① Press SUB • W to select LEVEL SELECT. (See page 18.)
② Press |◄◄ or ►►| to decrease or increase the volume.
 (Default : 0 dB)

Adjusting range: –∞ dB ← –10dB → +10dB (at 2-dB intervals)

–∞ dB: No output from the amplifier connected to the preout terminal (No sound is produced.)

Note:
● When a setting mode is selected but no operation is made within 5 seconds, the display will return to the normal mode. In such a case, press SUB • W again and repeat the setting procedure.
● These operations cannot be performed in Direct Memory mode or Navi Mute mode.

CQ-VX999EW

E N G L I S H

16

Sub-woofer Output (SUB·W) Mode Setting/D.D.B.C. (Digital Dynamic Base Control) Function Setting

Connect an optional power amplifier (CY-M9054EN, for example).
With sub-woofer output selected, press SUB • W to switch the SUB • W mode as follows.

Normal mode → LEVEL SELECT → DELAY SELECT → FREQ.SELECT

Note:
- Sub-woofer output is monaural that does not change (interlock) when a balance adjustment is made on the internal amplifier. (See page 11.)
- Sub-woofer output has none of the BAL//FAD, POSITION, SBC.SBC-SW, DRC II and SPACE effects.
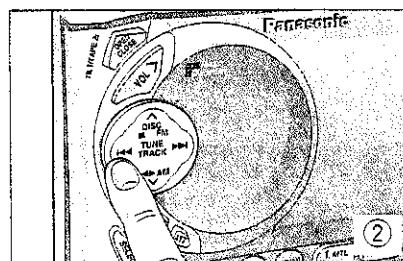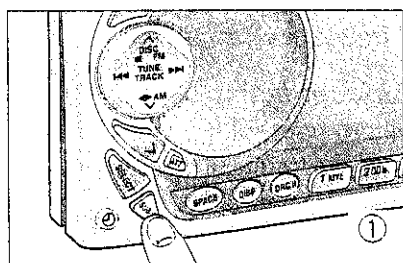

Sub-woofer Output Relative Volume Setting/Delay Time Adjustment

The bass volume arising from the difference between internal amplifier output and sub-woofer output generated depending on the car size and the relative positions of the speakers can be adjusted through delay time to increase the bass larger in volume than the other sound ranges.

① Press SUB • W to select DELAY SELECT.

② Adjust the delay time with pressing ▶▶ or ◀◀. (Default : 0 ms)
- Press ▶▶. If it is set to more than +1 ms , delay time increases and sub-woofer output comes later than internal amplifier output.
- Press ◀◀. If it is set to less than –1 ms, delay time decreases and sub-woofer output comes sooner than internal amplifier output.

Adjusting range: –10 ms to 0 ms to +10 ms (at 1-ms intervals)
　　　　　　　0 ms: Internal amplifier output and sub-woofer output will be simultaneous.
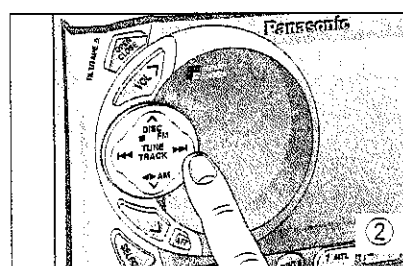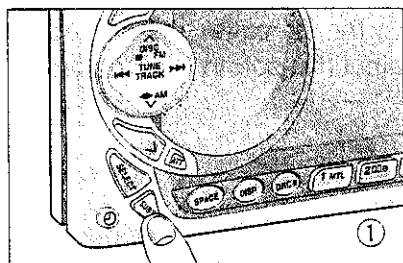
Setting Upper Limits of Sub-woofer Output Frequency/Setting Cutoff Frequency

Set upper limits of an output bass frequency (cutoff frequency) to suit the sub-woofers to be used.

① Press SUB • W to select FREQ. SELECT.

② Press ▶▶ to switch the frequency as follows.
(Default : FREQ. OFF)

OFF → 100Hz → 150Hz → 200Hz
(Sub-woofer filter)

(◀◀ : opposite direction)

CQ-VX999EW

Setting THRU Output

Connect an optional power amplifier (CY-M9054EN, for example).
The volume of THRU output changes as a balance adjustment is made on the internal amplifier. Set THRU output to operate with either the front or rear speakers according to the mounting position of additionally installed speakers. (Default : FRONT)

Normal mode ⟶ LEVEL SELECT ⟶ F/R SELECT
(See Page 17)
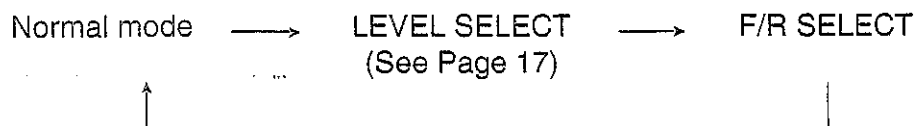
Note:
- THRU output is stereo.
- No operation can be performed in Direct Memory mode or Navi Mute mode.
- When a setting mode is selected but no operation is made within 5 seconds, the display will return to the normal mode. In such a case, press SUB • W again and repeat the setting procedure.
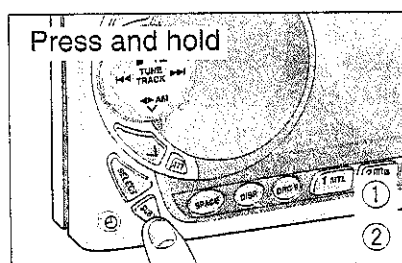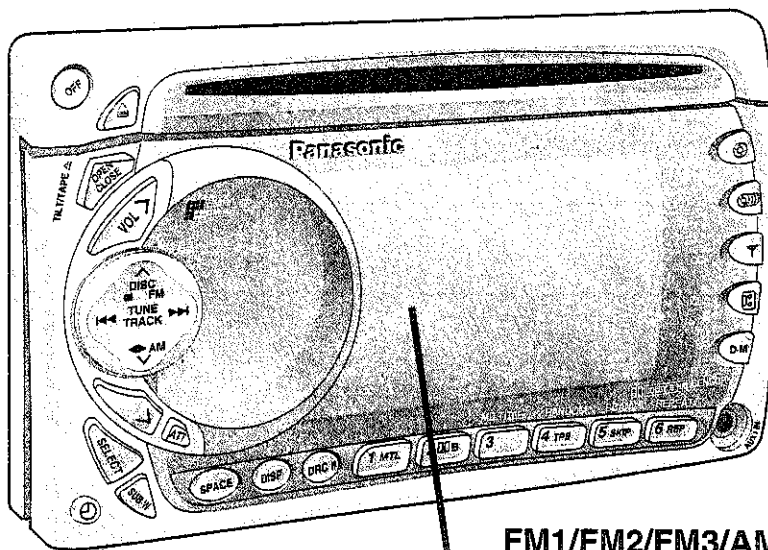
Press and hold

Adjusting the Volume of Additional Speakers to Internal Amplifier/Switching Interlock with Balance Adjustment

① Press and hold SUB • W for more than 2 seconds to select PREOUT THRU.

② Press SUB • W to select F/R SELECT.

③ Press ►►I or I◄◄ to switch FRONT or REAR.

CQ-VX999EW

19
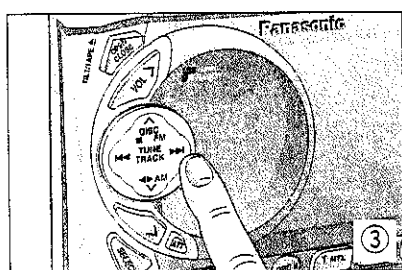
LISTENING TO THE RADIO
■ Display

**FM1/FM2/FM3/AM
(Band Indicator)**
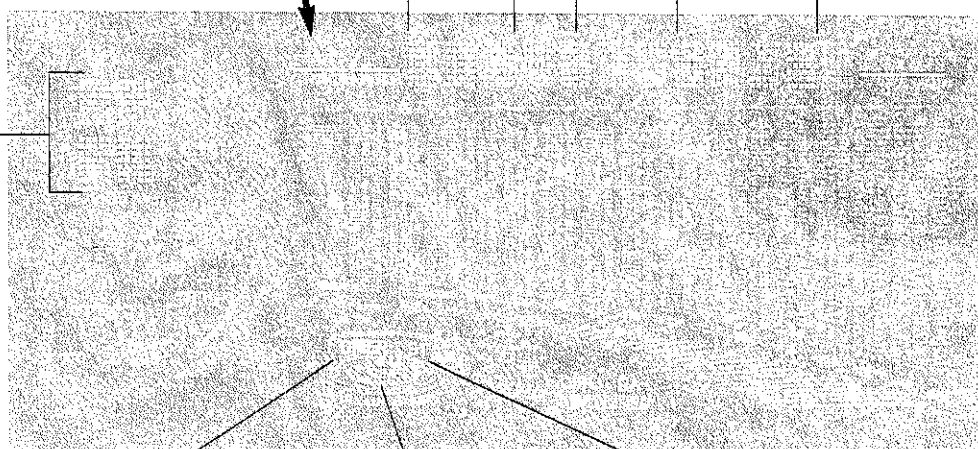Indicates the band being received.

Preset Indicator
Press a preset button, and the number of
the preset button is displayed.

Mode Indicator
Indicates tuner mode.

Frequency Indicator
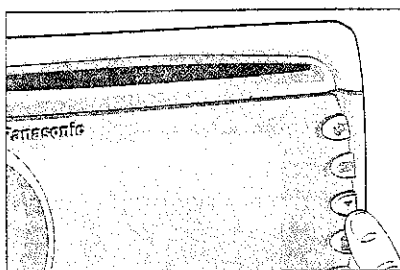Indicates a frequency in tuner mode.

DIVER (Diversity) Indicator
Remains lighted during diversity antenna
receive mode.

ST (Stereo) Indicator
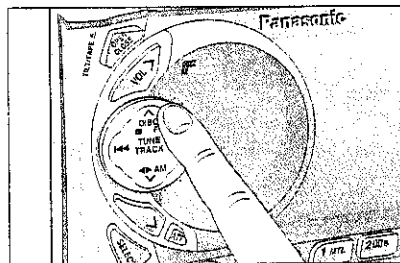Remains lighted while receiving a
stereo broadcast.

TUNE (Tuner) Indicator
Flashes during tuner mode.

20

Selecting Tuner Mode

- Press 𝖄 (TUNER), a broadcast is received after the power is turned on.
- When the current mode is other than tuner mode, press 𝖄 (TUNER) to switch to tuner mode.
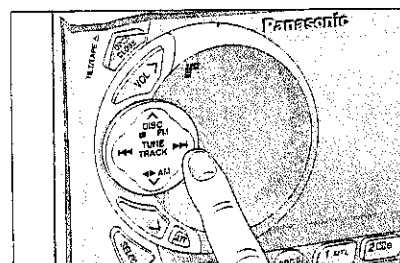
Switching Bands

- Press FM to select the bands as follows.

  FM1 → FM2 → FM3

- Press AM to select the AM band.

Manual Tuning

Press TUNE ►►I to raise the frequency.
Press I◄◄ TUNE to lower the frequency.

Automatic Seek Tuning

Hold and release

Press and hold I◄◄ TUNE or TUNE ►►I for more than 0.5 second, then release. The radio automatically stops on the next station.

LISTENING TO THE RADIO (Continued)

MONO/LOCAL Selection

- Much Interfernce is reduced during a weak FM stereo broadcasts when MONO is ON. (Only for FM mode).
- Searching stops automatically at a strong wave station only when LOCAL is ON.

Press Y (MONO/LOCAL) to switch the mode as follows.
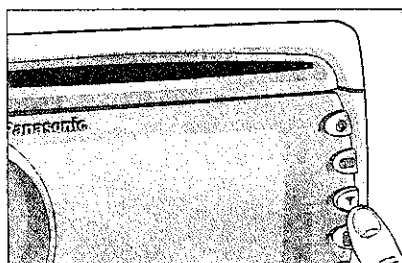
① **During FM broadcasts**
Press Y to switch the mode as follows. Release your finger at the desired mode.

MONO OFF		MONO ON		MONO OFF		MONO ON
LOCAL OFF	→	LOCAL OFF	→	LOCAL ON	→	LOCAL ON

② **During AM broadcasts**
Press Y to switch on or off the LOCAL mode as follows.

LOCAL OFF ↔ LOCAL ON

CQ-VX999EW

Preset Memory (Station Memory)
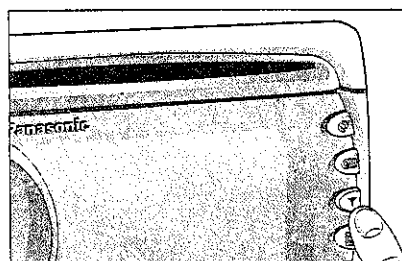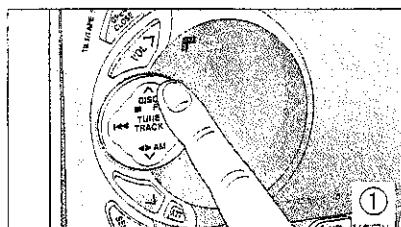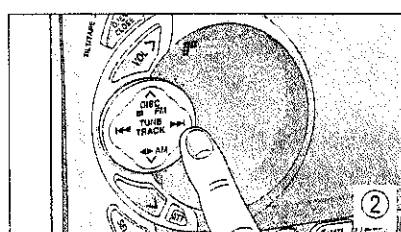
Up to 24 stations can be preset in the station memory as follows.

FM1	FM2	FM3	AM
6 stations maximum	6 stations maximum	6 stations maximum	6 stations maximum

Manual Station Preset

① Press FM or AM to select a desired band.

② Use Manual or Seek Tuning to find a station that you want to program into memory.
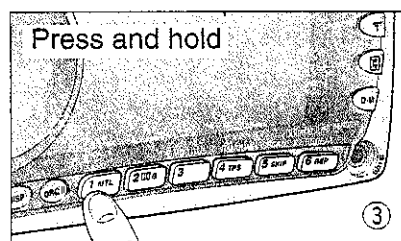
③ Press and hold one of the station selector buttons 1 to 6 for more than 2 seconds until the display blinks.
Repeat the process to set other stations for the FM1 to AM bands.

Preset number

Note :
You can change the memory setting by repeating the above procedure.
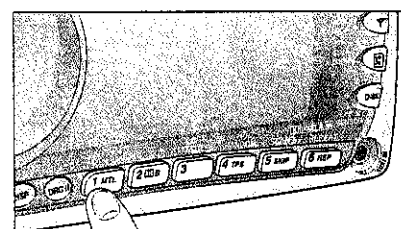
Tuning in a Preset Station

Press any of the buttons 1 to 6 to tune in the station preset.
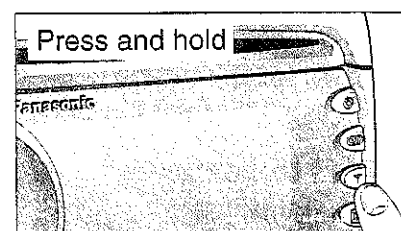
Auto Station Preset

Select a band, press and hold Y (TUNER) for more than 2 seconds.
- The 6 strongest available stations will be automatically set in memory on preset buttons 1 to 6.
- Once set, the preset stations are sequentially scanned for 5 seconds each.
- Press the appropriate preset button for the station you want to hear.

Caution:
For safety reasons, do not attempt to program while driving.
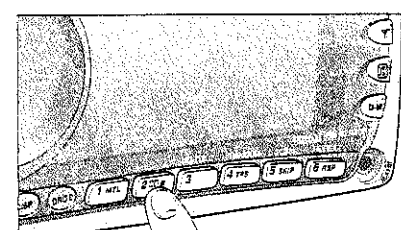
CASSETTE DECK OPERATION

■ Display
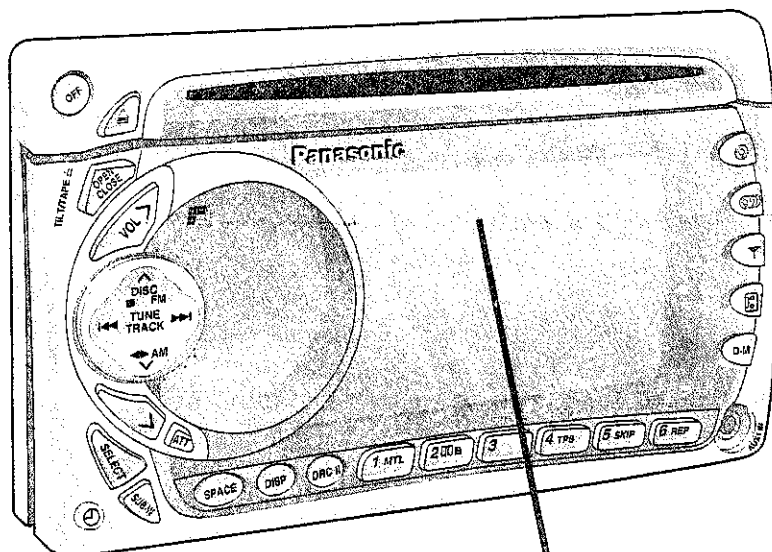
MTL (Metal) Indicator
Lights when metal tape is played.

SKIP Indicator
Lights when blank skip is functioning.

⑅ B (Dolby) Indicator
Lights when Dolby B NR is on.

REP (Repeat) Indicator
Lights when repeat play is on.
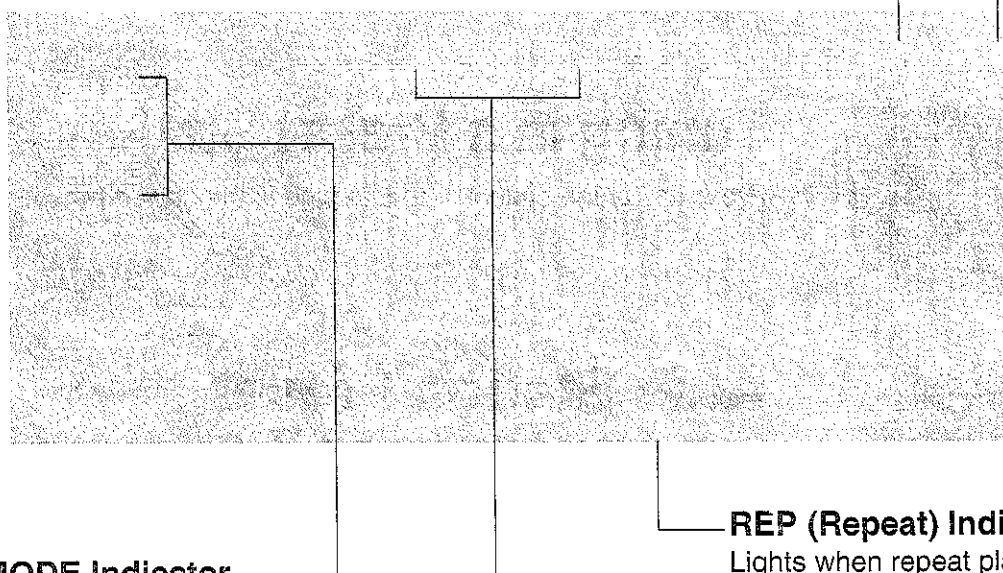
MODE Indicator
Lights when tape
is played.
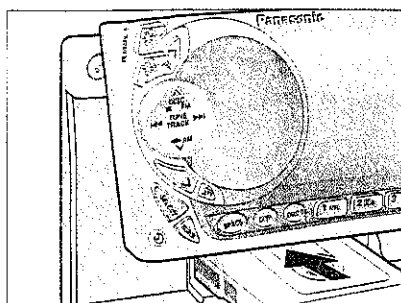
Inserting a Cassette Tape

① Press OPEN/CLOSE to open the front panel.
② Insert a cassette with the exposed tape side on the left. Tape mode is automatically selected to start playing the tape. If a cassette is inserted when power is off, power is automatically switched on.

Insert a cassette with the exposed tape side on the left.
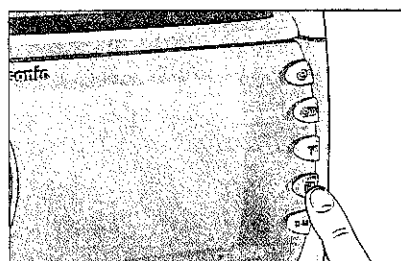
Selecting Tape Mode

If ▣ (TAPE) is pressed in other than tape mode when a cassette is already inside, cassette tape mode is automatically selected to start playing the tape.
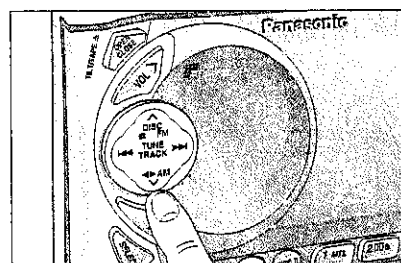
Changing Tape Sides

Press ◄► to change one cassette tape side to the other and the playing side is displayed.

► PLAY ► to play the top side
◄ PLAY ◄ to play the bottom side

When the tape comes to the end, the playing side is automatically changed to the other. (Auto Reverse System)
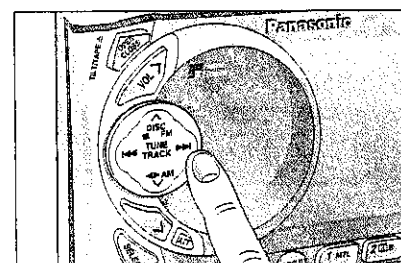
Rewind and Fast Forward

● Press either I◄◄ to rewind or ►►I to fast forward the tape.
● Press ■ to stop rewind or fast forward.
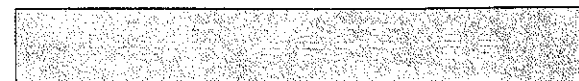
CASSETTE DECK OPERATION (Continued)
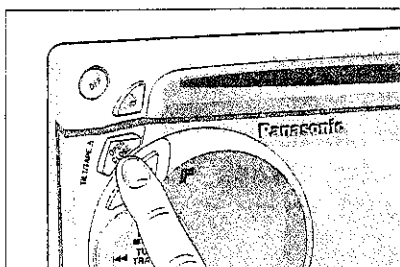
Ejecting the Tape

Press OPEN/CLOSE to eject the cassette tape. Power is automatically switched off.

Note:
Be cautious as the front panel is lifted up automatically when ejecting the tape.
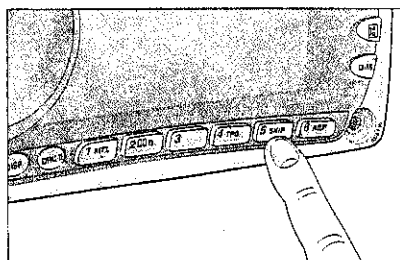
Blank Skip

● Press 5 (SKIP) to skip long unrecorded portions on the tape.

● Press 5 (SKIP) again to cancel.

Note:
● When both REP and BLANK SKIP are ON, REP has priority.
● The blank skip function does not work if an unrecorded part is shorter than 15 seconds.
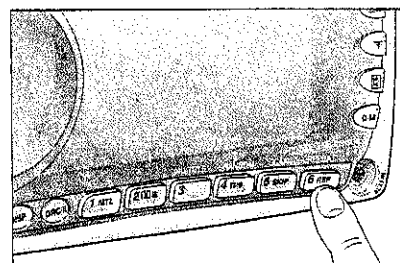
Repeat Playback

● Press 6 (REP) to repeat the same music you are now listening to.

● Press 6 (REP) again to cancel.
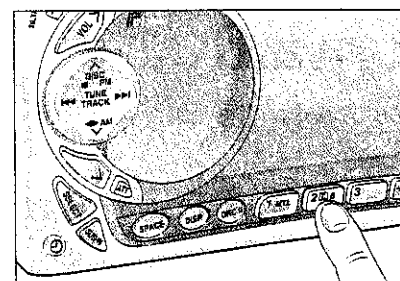
Switching Dolby B NR Mode

● Press 2 (⊟⊟ B) to set the Dolby B NR mode.

● Press 2 (⊟⊟ B) again to cancel.

Note:
● The Dolby B NR function does not work in tuner mode.
● If a tape not recorded in Dolby B NR mode is played in Dolby B NR mode, tone quality will be adversely affected by an imbalance in the high-frequency range.

CQ-VX999EW
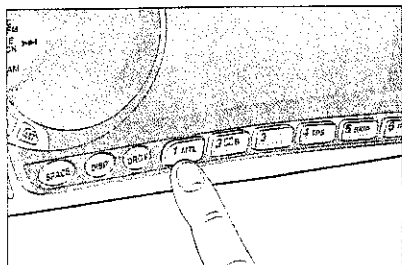
Switching Metal Tape Play Mode

• Press 1 (MTL) when playing a metal or chromium dioxide (CrO_2) tape.
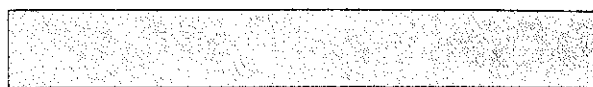
• Press 1 (MTL) again to cancel.

> **Note :**
> Playing non-metal tapes in MTL mode causes high frequency imbalance, which affects tone quality.
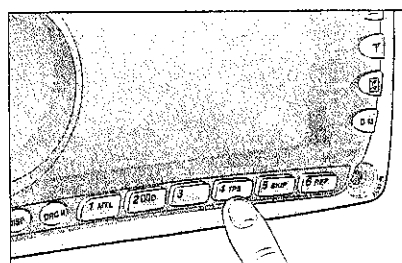
TPS Operation (Tape Program Search)

① Press 4 (TPS) to activate the Tape Program Search mode.
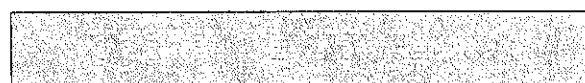
② From the current selection, decide which program you want to select. Now, press "▶▶l" several times forward (up to 9 programs) or press "l◀◀" several times backward (up to 8) to select the corresponding program number.

(Fast forward:)   (Rewind:)
1 ------------▶ 9   0 ------------▶ 8
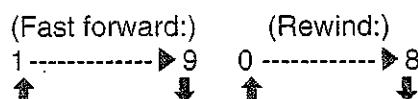
EX1. To select the current program again press 4 (TPS), and press "l◀◀" once.

EX2. To select the 1st program backward of the current selection, press 4 (TPS) once, and press "l◀◀" two times.
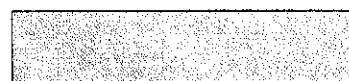
EX3. To select the next program, press 4 (TPS) and press "▶▶l" once.
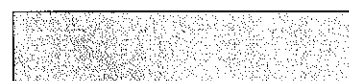
EX4. To select the 3rd program forward of the current selection, press 4 (TPS) once, and press "▶▶l" three times.
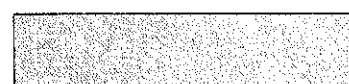
> **Note:**
> The TPS mode may not work correctly in the following cases. This, however, does not mean that the unit is defective.
> • There is an interval less than 4 seconds or having a high level of noise or hum between programs.
> • There is particularly low-level passage during the program. (particularly if they are of classical music.)

> **Note:**
> To maintain your cassette player in top condition, avoid using tapes that are longer than 90 minutes (C-90).

"For Inserting a Cassette Tape"

If you insert into the unit a cassette with a loose tape caused by forcing it into cassette with a finger or the like, the cassette may not be properly reproduced. In such a case, eject the cassette, make the tape tight, then insert it back into the deck.

27

CQ-VX999EW

CD PLAYER OPERATION

■ Display
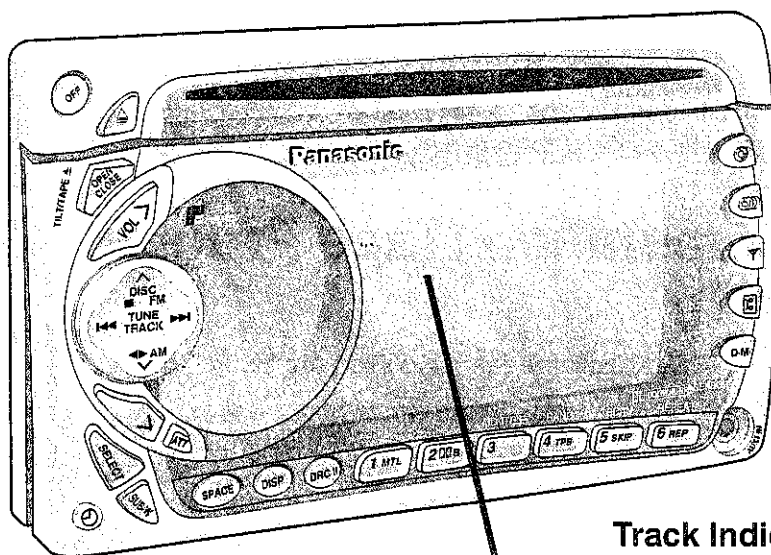
Track Indicator
Shows the current track number.

Time Indicator
Indicates track play time in minutes and seconds.
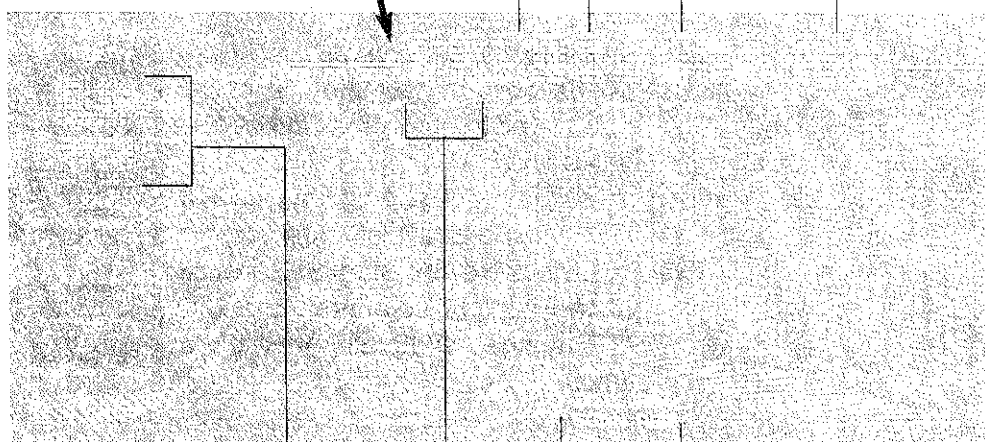
CD Mode Indicator
Indicates CD mode.

R ► (Random) indicator
Lights when random play is on.
REP (Repeat) indicator
Lights when repeat play is on.
SCAN indicator
Lights when scan is functioning.

Note:
CDs of Special Shape
Heart-shaped, octagonal, or other special-shaped CDs cannot be played.
Do not use such CDs because they could cause technical trouble.
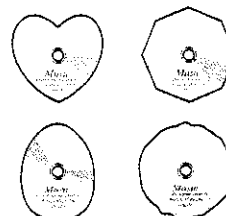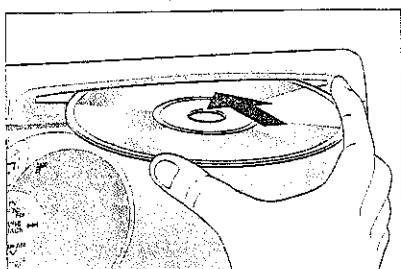
Inserting CD; Switching CD Mode

- Insert a CD into the CD slot with its label up, and the power is automatically switched on to start playing the CD.
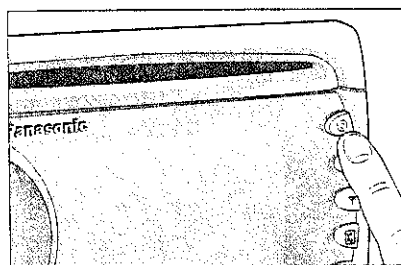
- Press ⓒ (CD) to switch to CD mode and start playing the CD when a CD is inside.

Caution:
Do not use commercially available CD accessories, such as a protect film and stabilizer, because they could cause technical trouble.
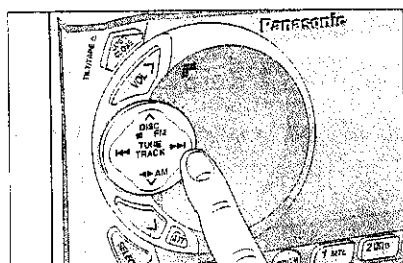
Selecting a Track

- Press "▶▶l" once to go to the next track.
- Press "l◀◀" once to play from the beginning of the track you are listening to. Press twice to play the previous track.
- Press repeatedly to skip the desired number of tracks.
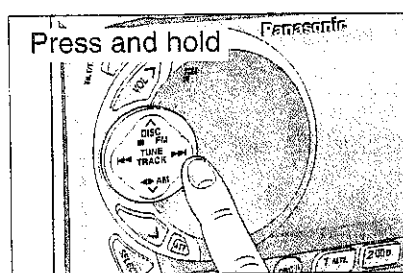
Searching a Track

Press and hold

- Press and hold "l◀◀" or "▶▶l" for more than 0.5 second to activate reverse through or fast forward a track.
- Release "l◀◀" or "▶▶l" to resume the normal CD play.
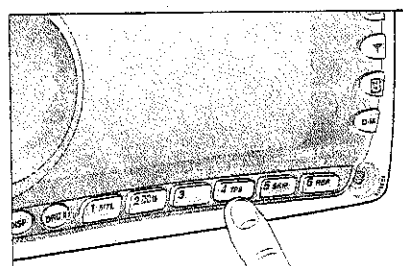
Random Selection

- Press 4 (RANDOM). A random selection of music is played from all available tracks.
- Press 4 (RANDOM) again to cancel.

CQ-VX999EW

CD PLAYER OPERATION (Continued)
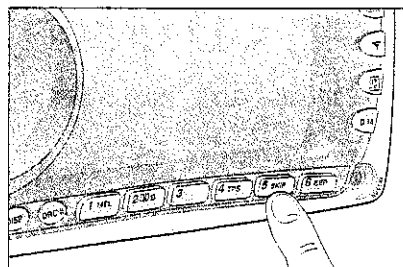
Scanning a Disc

- Press 5 (SCAN). The display will blink and the first 10 seconds of each track on the disc play in sequence.
- Press 5 (SCAN) again to cancel.
- Scan mode is also released when the CD has come to the beginning of the original program, which will then be played again.
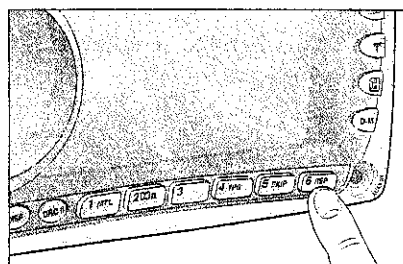
Repeating a Track

- Press 6 (REPEAT) to repeat the current selection.
- Press 6 (REPEAT) again to cancel.
  The current selection will continue to repeat until you press 6 (REPEAT) again.
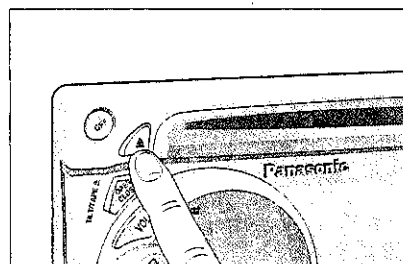
Stopping and Ejecting a Disc

Press "▲" to stop CD play, and the disc will be quietly ejected from the CD slot.
Power is automatically switched off after the CD is ejected.

Note:
- If a CD is left unremoved for a while after ejection, it is automatically retracted inside.
- The panel is closed fully once to make it easy to remove an ejected CD.

Caution:
Do not adjust the front panel angle or open/close the front panel while a CD is left unremoved in the CD slot.

CQ-VX999EW

CD/MD CHANGER CONTROL OPERATION

An optional CD changer (CX-DP801EN for example) or MD changer is necessary.

■ Display
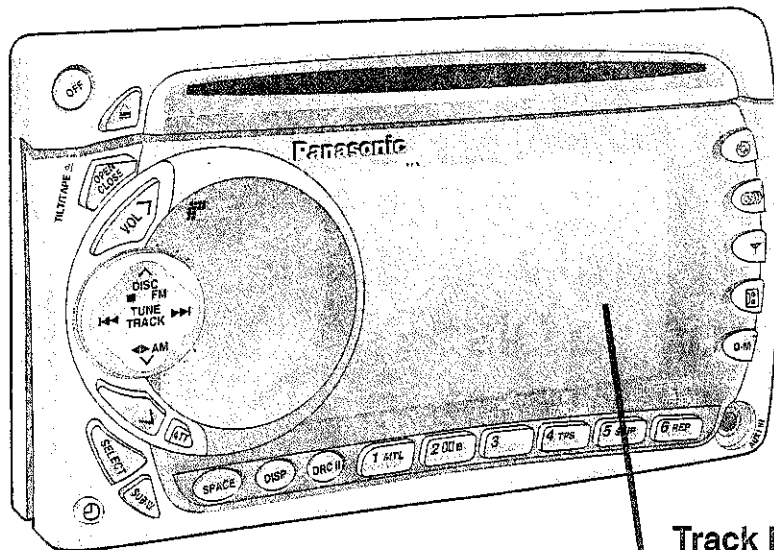
Disc Number Indicator
Shows the current disc number.

Title Indicator

　　　　　: Lights when DISC TITLE
　　　　　　is displayed.
　　　　　: Lights when TRACK
　　　　　　TITLE is displayed.

Track Number Indicator
Shows the current track number.

Time Count Indicator
Indicates the time count of the current program in minutes and seconds.

Mode Indicator
Indicates CD/MD changer mode.

REP (Repeat) indicator
　　Lights when repeat play.
R ► (Random) indicator
　　Lights when random play.
SCAN indicator
　　Lights when scanning.
DISC indicator
　　Lights when disc repeat, disc random or disc scanning.

31

CQ-VX999EW

CD/MD CHANGER CONTROL OPERATION
(Continued)
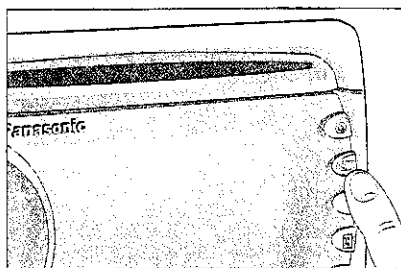
To Start the CD/MD Changer

● While a changer is connected, press ⓪))) (CHANGER) to switch to the changer mode and start playing automatically.

MODE
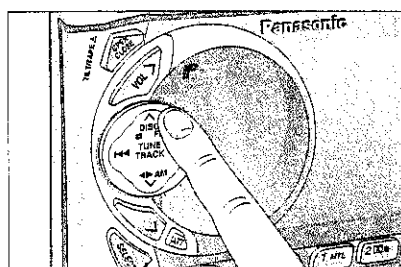
Selecting a Disc

Press "∨ DISC" or "DISC ∧" to select a disc in descending or ascending order.
Then, the selected disc will start playing from the first track.
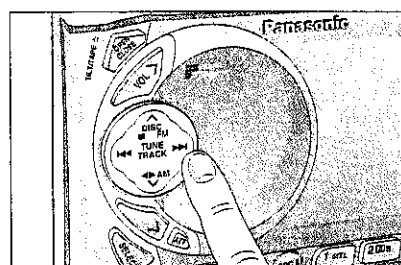
Selecting a Track

● Press "▶▶I" once to go to the next track.
● Press "I◀◀" once to play from the beginning of the current track. Press twice to play the previous track.
● Press repeatedly to skip the desired number of tracks.

Searching a Track

Press and hold

● Press and hold "I◀◀" or "▶▶I" for more than 0.5 second to activate reverse through or fast forward a track.
● Release "I◀◀" or "▶▶I" to resume the normal CD play.

CQ-VX999EW
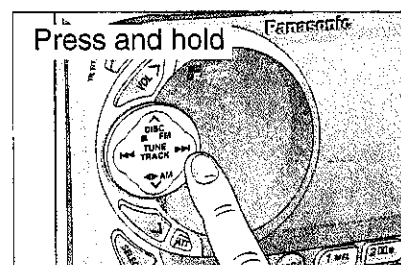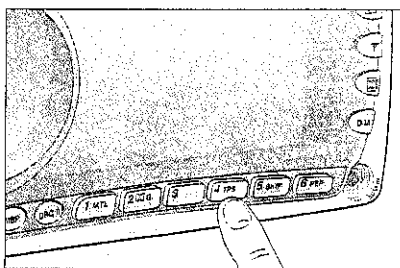
Random Selection

Track Random Play

● Press 4 (RANDOM). A random selection of music is played from all available tracks.
● Press 4 (RANDOM) again to cancel.
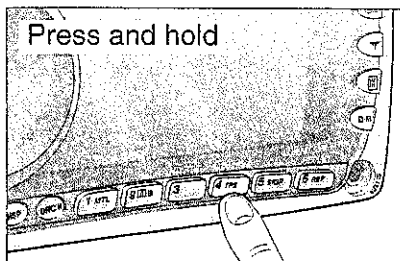
Disc Random Play

● Press and hold 4 (RANDOM) for more than 2 seconds. A random selection of music is played from all available discs.
● Press and hold 4 (RANDOM) for more than 2 seconds again to cancel.
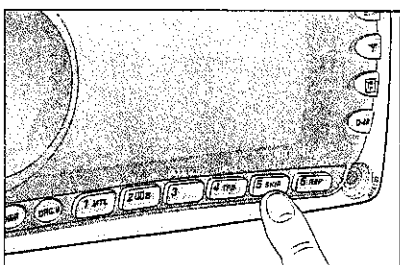
Scanning

Scanning Tracks

● Press 5 (SCAN). The display blinks and the first 10 seconds of each track on the discs play in sequence.
● Press 5 (SCAN) again to cancel.
● Scan mode is also released when the disc has come to the program preceding the original program.
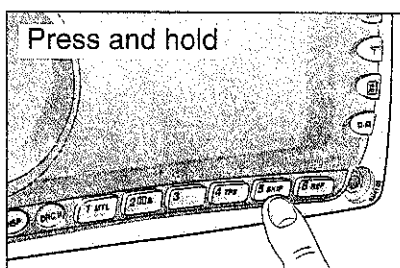
Scanning Discs

● Press and hold 5 (SCAN) for more than 2 seconds. The 1st track of all the discs in the magazine is played for 10 seconds each.
● Press 5 (SCAN) again to cancel.
● Scan mode is also released when the disc has come to the program preceding the original program.
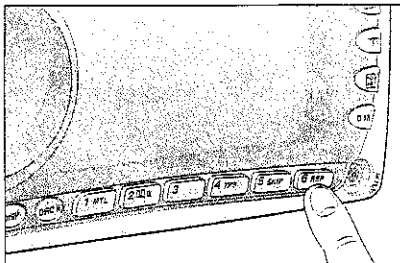
Repeat Play

Repeating a Track
- Press 6 (REPEAT) to repeat the current selection.
- Press 6 (REPEAT) again to cancel.
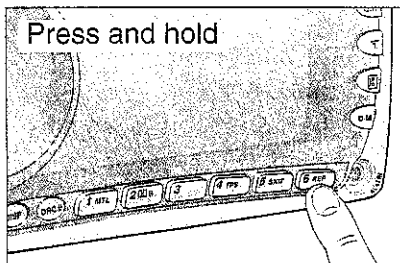
Press and hold

Repeating a Disc
- Press and hold 6 (REPEAT) for more than 2 seconds to repeat the current selection.
- Press and hold 6 (REPEAT) for more than 2 seconds again to cancel.
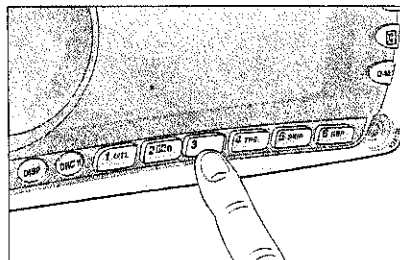
Recalling MD Titles
(Only for MD Changer)

Call the title information of the MD in the MD changer back on the display. (12 characters maximum)

Press 3 (MD TITLE) to switch the MD title information display as follows:

Normal mode → MD disc title → MD track title

CQ-VX999EW
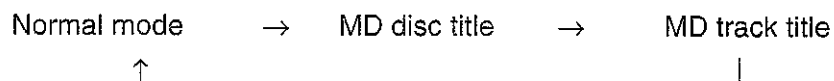
AUX IN OPERATION

■ Display
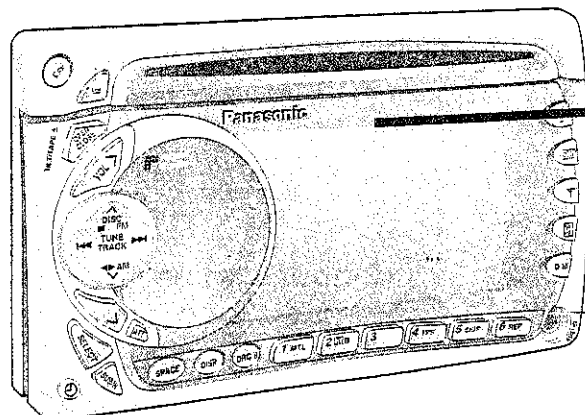
——— AUX1 IN (AUX INPUT CONNECTOR)

AUX IN

An external device may be connected to AUX IN (external input) for listening. (For details, refer to the manual for the connected device.)
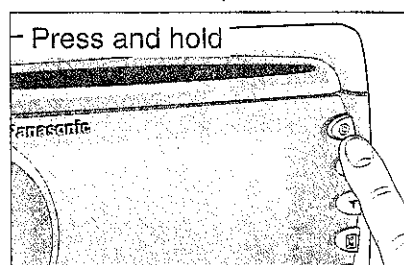
Press and hold

Operation of Audio Set Connected to AUX1 IN Front Jack

Press and hold ⓒ (AUX1 IN) for more than 2 seconds, and AUX1 IN appears on the display, indicating that the audio set connected to the AUX1 input connector is ready for operation.
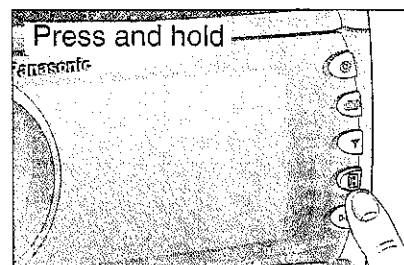
Press and hold

Operation of Audio Set Connected to AUX2 IN on Front Panel

Press and hold ⓒ (AUX2 IN) for more than 2 seconds, and an external device connecting to AUX2 IN is ready for operation.

Note:
- Use the controls on the connected external device to operate it.
- To use AUX2 IN, connect it to the AUX input cord (AUX2 IN) on the back. (See page 49.)

CLOCK OPERATION

■ Display
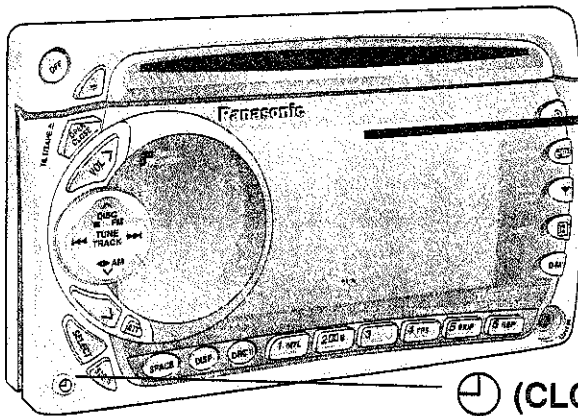
12-hour system
Time is displayed.

⊕ **(CLOCK) Button**
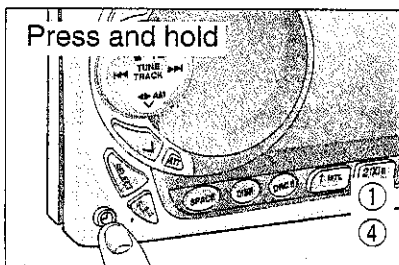
Press and hold

Adjusting the Clock

① Press and hold ⊕ (CLOCK) for more than 2 seconds to select clock adjust mode.

② Press I◄◄ to select hour adjust mode.
Press ∧ or ∨ to adjust the hours.

③ Press ►►I to adjust minute adjust mode.
Press ∧ or ∨ to adjust the minutes.

④ When you have set the time, press ⊕ (CLOCK).
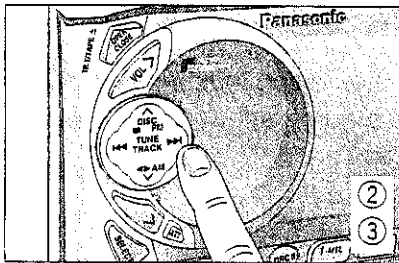
Note:
Time adjustment can not be made when the power is off.
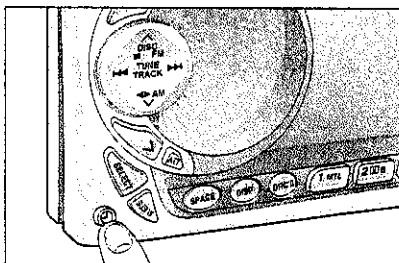
Clock Display ON/OFF

Press ⊕ (CLOCK) each time to turn clock display on and off.

CLOCK ON: Clock display is turned on.

↕

CLOCK OFF: Normal display, No clock display

Note:
● The word ADJUST is shown if the clock is not adjusted.
● If clock display is turned on when it is set to DISP OFF, the display returns to normal after about 5 seconds of clock display.
● When MD title is displayed, MD title display is prior to the clock display even in CLOCK ON mode.

CQ-VX999EW

USEFUL FUNCTIONS

■ Display

Frequency Indicator
The current receiving frequency saved in the direct memory is indicated.
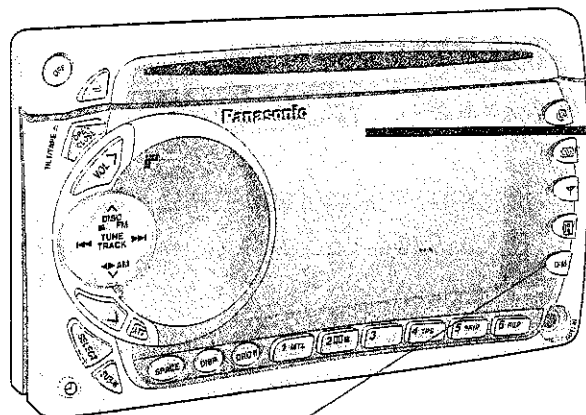
D • M (Direct Memory) button

Direct Memory Indicator
Lights in case of direct memory mode.

Direct Memory

Traffic information and a desired station saved in the memory can be easily listened to using a single button.
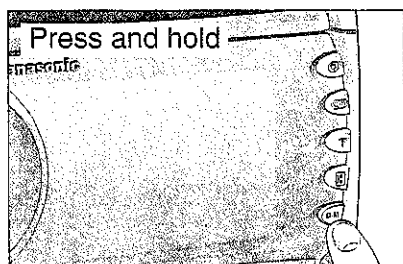
Press and hold

Direct Memory Write/D • M (User Memory)

Tune a station, then press and hold D • M for more than 2 seconds to save the station in the memory.
(D • M default : FM 87.5 MHz)
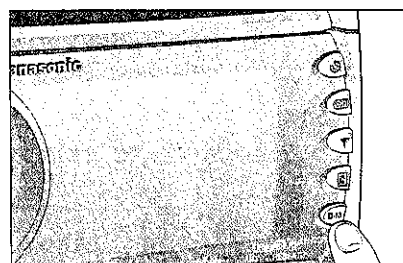
Recalling Traffic Information/Recalling Direct Memory

Press D • M, and the mode changes as follows and the desired station is received.

Normal mode   D • M
(OFF or other original mode) ◄────► (User memory)

Note:
* The Direct Memory can be recalled even when power is off and in any mode.
* SPACE effect remains off during direct memory mode. (See page 15.)

USEFUL FUNCTIONS (Continued)

Dimmer

Display brightness with the side-marker lamps on or off can be set.
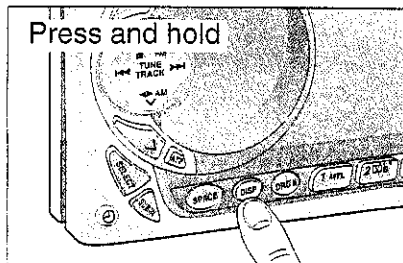
Press and hold

Press and hold DISP for more than 2 seconds to switch the dimmer level as follows.

DIMMER HIGH → DIMMER MID → DIMMER LOW

(Dimmer default : MID when side-marker lamps are on)
(HIGH when side-marker lamps are off)

Other Settings
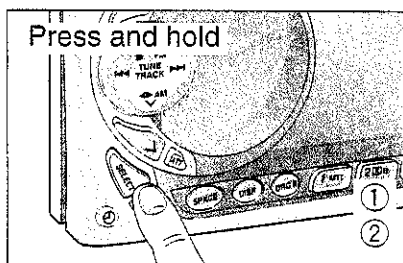
Press and hold

Function Setting Mode Selection

① Press and hold SELECT for more than 2 seconds.
② Press SELECT to switch the function setting mode as follows.

Normal mode ──→ BEEP SELECT ──→ TITLE SCROLL ──→ MUTING SEL

PANEL SELECT ←── CLOCK SELECT ←── SPEANA SPEED
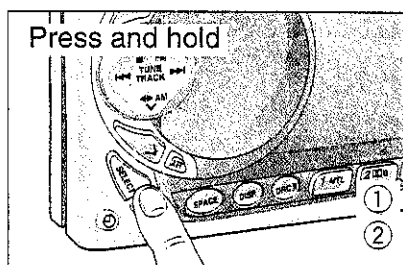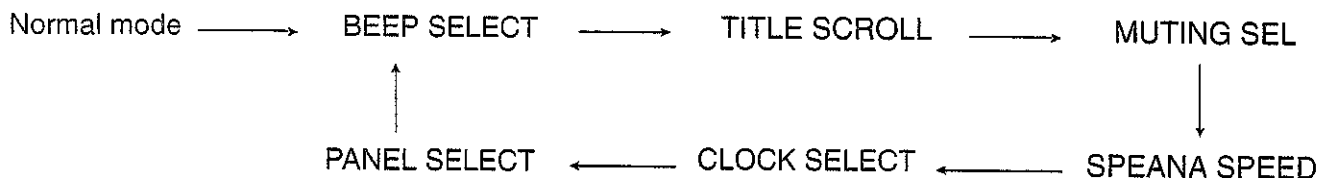
Press and hold

Beep ON/OFF Setting

Button operation sound (beep) can be turned off.
① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT to select BEEP SELECT.
③ Press ▶▶│ or │◀◀ to turn beep on or off. (Beep default : ON)

: Button operation sound on

: Button operation sound off

38

Press and hold ①②

③
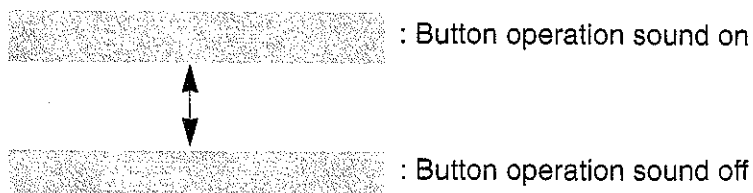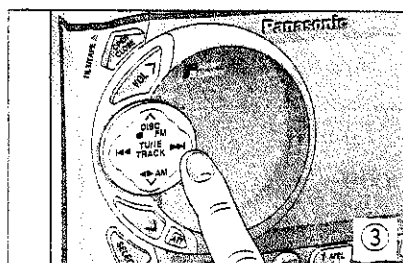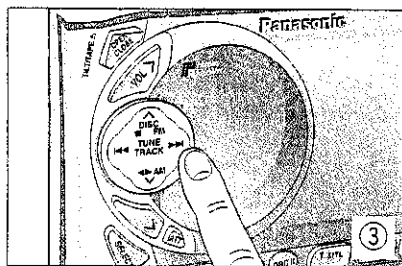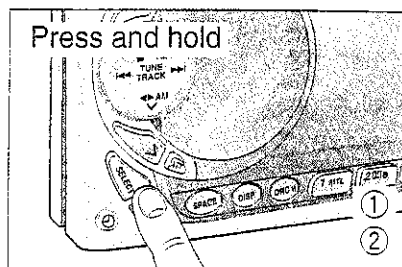
Title Scroll Setting

When the display shows an MD title, the title can be made to move. (See pages 34.)

① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT in function setting mode to select TITLE SCROLL.
...③ Press ►►I or I◄◄ to select SCROLL ON or OFF.
(TITLE SCROLL default : ON)

: MD title moves.

: MD title stops moving.

Press and hold ①②

③
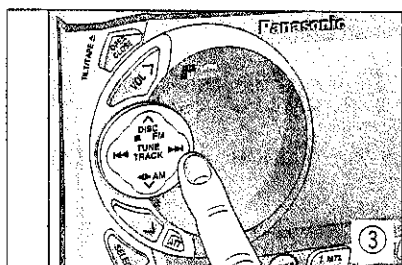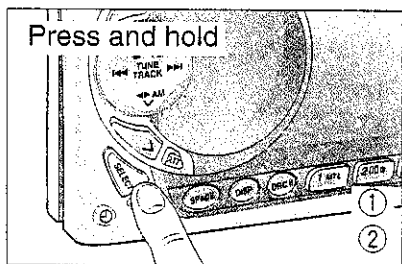
Navigation Mute Level Setting

This requires an optional navigation system (CN-V900DT, for example) and system upgrading.

The volume of your unit can be automatically lowered when navigation voice guide begins. Connect the navi mute cord of your unit to that of the navigation system.

① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT in function setting mode to select MUTING SEL.
③ Press ►►I to switch the volume level as follows.
(Navi mute default : MUTING ON)
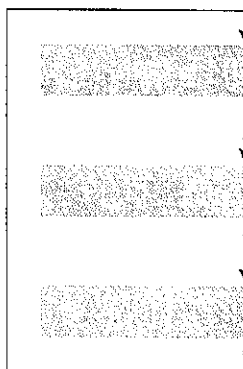
: Your set's volume is lowered to zero (no sound).

: Its volume is lowered to about one half.

: Its volume remains normal.

(I◄◄ : opposite direction)

CQ-VX999EW

39

USEFUL FUNCTIONS (Continued)
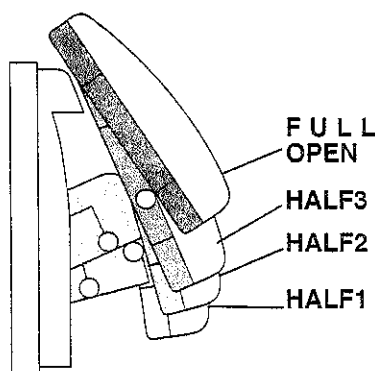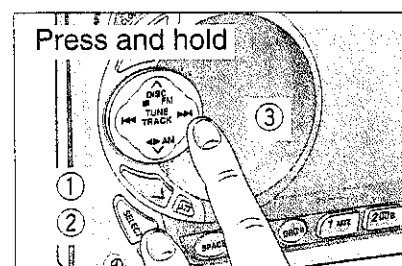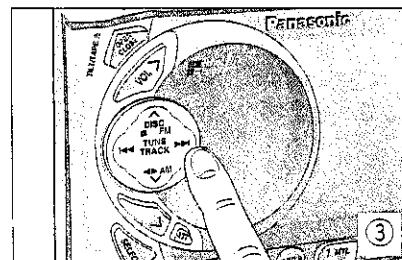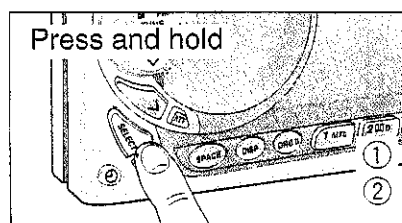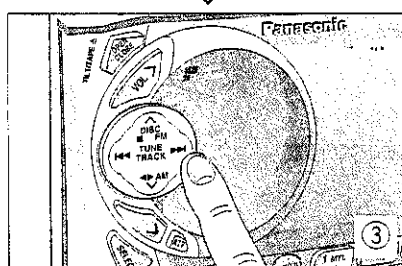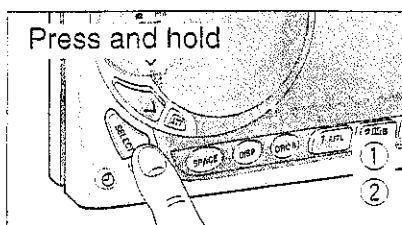
Press and hold

Spectrum Analyzer Speed Setting

Spectrum Analyzer display speed can be changed.
① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT in function setting mode to select SPEANA SPEED.
③ Press ▶▶I or I◀◀ to select FAST or SLOW.
(Spectrum Analyzer speed default : FAST)

| FAST | : Spectrum Analyzer display moves fast.

| SLOW | : Spectrum Analyzer display moves slow.

Press and hold

Clock Display Setting

Clock display can be set by pressing ⏱ (in CLOCK ON mode).
(See page 36.)
① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT in function setting mode to select CLOCK SELECT.
③ Press ▶▶I or I◀◀ to select DISP ON or OFF.
(Clock display default : DISP OFF)

| DISP ON | : Press ⏱ and clock display appears.

⬍

| DISP OFF | : Press ⏱ and clock display appears for about 5 seconds then returns to normal display.

Press and hold

Front Panel Full Open Position Setting

The front panel can be set to any one of the 4 upper limits when it is opened.
① Press and hold SELECT for more than 2 seconds to select function setting mode.
② Press SELECT in function setting mode to select PANEL SELECT.
③ Press ▶▶I to switch the upper limits as follows.

FULL → HALF1 → HALF2 → HALF3

(I◀◀ : opposite direction)

FULL
OPEN
HALF3
HALF2
HALF1

> **Caution:**
> If there is any obstacle above, set an upper limit clear of the obstacle.

40

REMOTE CONTROL OPERATION
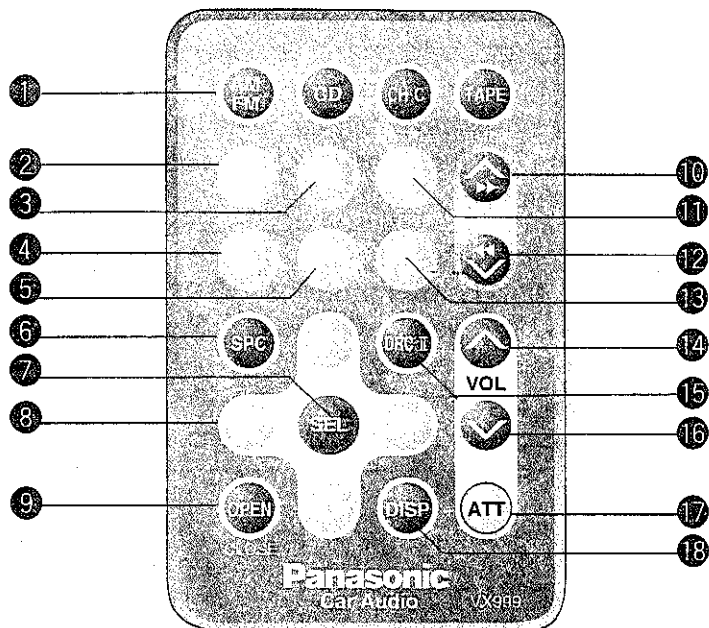
1. AM/FM button
2. Preset button 1
3. Preset button 2
4. Preset button 4
5. Preset button 5
6. SPC (SPACE) button
7. SEL button
8. ∧, ∨, <, > buttons
9. Panel OPEN/CLOSE button
10. Frequency up button
11. Preset button 3
12. Frequency down button
13. Preset button 6
14. Volume up button
15. DRC II button
16. Volume down button
17. ATT button
18. DISP button

See page 52 for how to replace the battery in the remote controller.

[Operating Procedures]

Aim the remote controller at the sensor of your unit.

GENERAL

Volume Adjustment
⑭ ⑯ Volume control buttons
Press ∧ to increase the volume.
Press ∨ to decrease the volume.

Sound Field Effect Switching
⑥ SPC button
Press SPACE to switch the sound field effect as follows.
LIVE HOUSE → CONCERT HALL → JAZZ CLUB
↑ ↓
SPACE OFF←CINEMA←VOCAL←DISCO←STADIUM

Panel Open/Close
⑨ Panel OPEN/CLOSE button
● Press this button to open the panel. (If a tape is inside, it will be ejected.)
● Press it again to close the panel.
● Press and hold it for more than 0.5 second, the panel tilts.

Instantaneous Volume Drop (Attenuator)
⑰ ATT button
● Press ATT to decrease the volume to about 1/10 of the present level.
● Press it again to cancel.

Spectrum Analyzer Display Switching
⑱ DISP button
Press DISP to switch the spectrum analyzer display in the 16 patterns.

DRC II (Dynamic Road Noise Control II) Switching
⑮ DRC button
Press DRC II to switch the DRC type as follows.
DRCII TYPE 1→DRCII TYPE 2→DRCII TYPE 3
↑ ↓
DRCII OFF ← DRCII TYPE 4

CQ-VX999EW

Tone Quality Adjustment/HEQ Setting
⑦ SEL, ⑧ ∧, ∨, <, >, ⑥ SPC, ② preset 1, ③ preset 2 button

1. HEQ Switching
Press SEL to switch tone quality as follows.

Normal Mode → HEQ → GEQ → BAL//FAD
↑ ↓
Preout ← DRCII ← SBC/SBC-SW ← Position

2. Selecting Desired Tone Quality
Select a desired tone quality using ∧, ∨, <, >.

With the center fixed flat, any of the 49 equalizer patterns, arranged in·vertical and horizontal directions, can be selected.

GEQ Setting
⑦ SEL, ⑧ ∧, ∨, <, >

- Press SEL to select GEQ mode.
- Press <, > (frequency up/down) to select a frequency.
- Press ∧ to raise the level.
  Press ∨ to lower the level.

GEQ Memory
⑦ SEL, ⑧ operation buttons, ⑥ SPACE, ② preset 1, ③ prese 2, ⑪ preset 3, ④ preset 4, ⑤ preset 5, ⑬ preset 6

① Select GEQ.
② Select a desired equalizer characteristic.
③ Press and hold one of the memory buttons for more than 2 seconds.

The preset number blinks, indicating that the selected equalizer characteristic has been saved in the memory.

GEQ Memory Recall
⑦ SEL, ⑧ operation buttons , ⑥ SPACE, ② preset 1, ③ prese 2, ⑪ preset 3, ④ preset 4, ⑤ preset 5, ⑬ preset 6

① Press SEL to select GEQ.
② Press one of the memory buttons.

TUNER (RADIO)

Selecting Tuner Mode
⑨ AM/FM button

If the mode is other than tuner mode, press this button to change to tuner mode.

Switching Bands
⑨ AM/FM button

Press this button to switch the AM and FM band alternately.

Tuning (Manual)
⑩ ∧TUNE, ⑫ TUNE∨

Press ∧ to raise the frequency.
Press ∨ to lower the frequency.

Automatic Seek
⑩ ∧TUNE, ⑫ TUNE∨

Press and hold ∧ or ∨ for more than 0.5 second, then release. The radio automatically stops on the next station.

Preset Tuning
② preset 1, ③ prese 2, ⑪ preset 3, ④ preset 4, ⑤ preset 5, ⑬ preset 6

Press one of the buttons 1 to 6 preset in the memory , and the corresponding preset station is tuned in.

Preset Memory
⑨ AM/FM, ⑩ ∧TUNE, ⑫ TUNE∨, ② preset 1, ③ preset 2, ⑪ preset 3, ④ preset 4, ⑤ preset 5, ⑬ preset 6

① Press AM/FM to select the AM or FM band as desired.
② Press ∧ or ∨ to tune in to a desired station.
③ Press and hold one of the preset buttons 1 to 6 for more than 2 seconds until the display blinks. It indicates that the station has been preset in the memory.

Auto Preset Memory
⑨ AM/FM, ⑩ ∧TUNE, ⑫ TUNE∨, ② preset 1, ③ preset 2, ⑪ preset 3, ④ preset 4, ⑤ preset 5, ⑬ preset 6

- Press and hold AM/FM (AUTO PRESET) for more than 2 seconds, and frequency search begins with the lowest of the frequencies on the band being received, and up to 6 stations are automatically stored in the preset memory in the order of signal intensity.
- After search, the preset stations are received for 5 seconds each in sequence.
- When you find a station you wish to listen to, press the corresponding button among preset buttons 1 to 6.

CQ-VX999EW
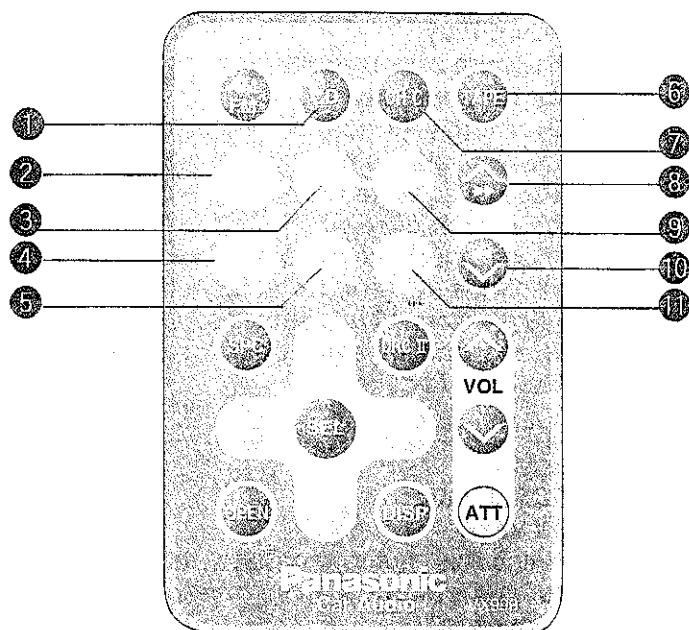
① CD mode/AUX1 IN button
② Disc down button
③ Disc up button
④ Random play button
⑤ Scan button
⑥ AUX2 IN button
⑦ Changer mode button
⑧ Disc track up button
⑨ MD TITLE call button
⑩ Disc track down button
⑪ Repeat button

CD PLAYER

Selecting CD Mode
① CD Mode button
If the mode is other than CD mode, press this button to switch it to CD mode.

Selecting a Track
⑧ ▶▶TRACK, ⑩ TRACK◀◀
● Press ▶▶ once to go to the next track.
● Press ◀◀ once to paly from the beginning of the current track. Press ◀◀ twice to play the previous track.

Searching a Track
⑧ ▶▶TRACK, ⑩ TRACK◀◀
● Press and hold ◀◀ or ▶▶ for more than 0.5 second to activate reverse through or fast forward a track.
● Release ◀◀ or ▶▶ to resume the normal CD play.

Random Play
④ Random play button
● Press this button. A random selecting of music is played from all available tracks.
● Press it again to cancel.

Scanning Tracks
⑤ SCAN button
● Press this button, and each track is played for 10 seconds from the beginning in sequence.
● Press it again to cancel.

Repeat Play
⑪ REPEAT button
● Press this button to repeat the current track.
● Press it again to cancel.

CQ-VX999EW

REMOTE CONTROL OPERATION (Continued)

CD/MD CHANGER

Selecting CD/MD Changer Mode
⑦ CH·C (Changer Mode) button
If the mode is other than changer mode, press this button to switch it to changer mode.

Selecting a CD
② \/DISC, ③ DISC/\ button
- Press /\ to select discs in ascending order.
- Press \/ to select discs in descending order.

MD Title
⑨ MD TITLE call button
Press this button to switch the MD title information display as follows:

Normal mode → MD disc title → MD track title

Selecting a Track
⑧ ▷▷TRACK button, ⑩ TRACK◁◁ button
- Press ▷▷ once to go to the next track.
- Press ◁◁ to play from the beginning of the current track. Press ◁◁ twice to play the previous track.

Searching a Track
⑧ ▷▷TRACK button, ⑩ TRACK◁◁button
- Press and hold ◁◁ or ▷▷ for more than 0.5 second to activate reverse through or fast forward a track.
- Release ◁◁ or ▷▷ to resume the normal CD play.

Random Play
④ Random play button
Track random play
- Press this button. A random selection of music is played from all available tracks.
- Press it again to cancel.
Disc random play
- Press and hold the button for more than 2 seconds. A random selection of music is played from all available discs.
- Press and hold it again for more than 2 seconds to cancel.

Scanning
⑤ SCAN button
Track scan
- Press this button, and each track is played for 10 seconds from the beginning in sequence.
- Press it again to cancel.
Disc scan
- Press and hold this button for more than 2 seconds. The 1st track of all the discs in the magazine is played for 10 seconds each.
- Press and hold it for more than 2 seconds again to cancel.

Repeat Play
⑪ REPEAT button
Track repeat
- Press this button to repeat the current track.
- Press it again to cancel.
Disc repeat
- Press and hold this button for more than 2 seconds to repeat the current disc.
- Press and hold it again for more than 2 seconds to cancel.

AUX1 IN

AUX1 IN Switching
① AUX1 IN button
Press and hold this button for more than 2 seconds, and the audio set connected to the AUX1 IN jack is ready for operation.

AUX2 IN

AUX2 IN Switching
⑥ AUX2 IN button
Press and hold this button for more than 2 seconds, and the audio set connected to the AUX2 IN jack is ready for operation.

❶ Metal mode button
❷ Dolby B button
❸ TPS button
❹ Blank skip button
❺ TAPE mode change/TAPE play button
❻ Fast forward button
❼ Rewind button
❽ Repeat button
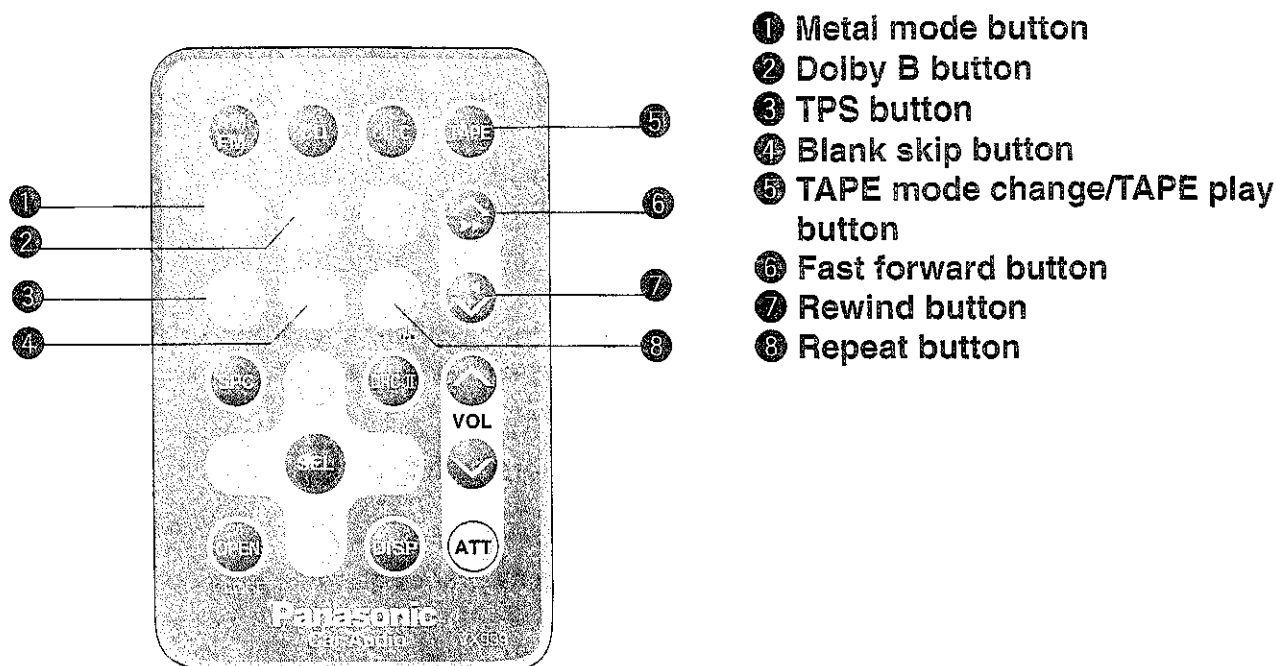
CASSETTE DECK

Selecting Tape Mode
❺ **Tape mode button**
If the mode is other than tape mode, press this button to switch to tape mode.

Changing Tape Sides
❺ **TAPE play button**
Press this button to change the tape side alternately.
● ▶ PLAY ▶ to play the top side
● ◀ PLAY ◀ to play the bottom side

Fast Forward/Rewind
❻ ▶▶ button, ❼ ◀◀ button, ❺ TAPE play button
● Press ▶▶ for fast forward.
● Press ◀◀ for rewind.
  Press TAPE to stop fast forward/rewind.

Dolby B NR
❷ **Dolby B button**
● Press this button to set the Dolby B NR mode.
● Press it again to cancel.

Metal Mode
❶ **Metal mode button**
● Press this button to select metal mode.
● Press it again to cancel.

Repeat Play
❽ **REPEAT button**
● Press this button to repeat the same music you are now listening to.
● Press it again to cancel.

Blank Skip
❹ **Blank skip button**
● Press this button to skip long unrecorded portions on the tape.
● Press it again to cancel.

❸ TPS , ❻ ▶▶, ❼ ◀◀ buttons
① Press TPS to activate the tape program search mode.
② From the current selection, decide which program you want to select. Now, press ◀◀ several times forward or press ▶▶ several times backward to select the corresponding program number.
See page 27 for examples.

CQ-VX999EW

45

Installation Guide

■ Precautions

If possible, this equipment should be professionally installed. In case of difficulty, please consult with your nearest professional installer.

1. This unit only operates in a 12-volt DC negative ground system.
2. Before performing installation and wiring, remove the negative (–) terminal of the battery. (See Note below.)

> **Note :**
> Do not disconnect the negative battery terminal in vehicles equipped with trip or navigational computers. All electronic memory settings previously registered will be lost. Take extra care to avoid causing short-circuits when installing the unit.

3. Follow the wiring connection diagram carefully to avoid causing damage to the unit.
4. Insulate all exposed wires to prevent short-circuits.
5. Secure all loose wires after installing the unit.
6. Please carefully read the operating and installation instructions of any equipment connected to this unit.

■ Transportation bracket removal

Be sure to remove the bracket for transportation before use (installation).
✻Use screws (M5 x 8 mm) with washers for installation.
Be careful not to lose any of these parts.

CQ-VX999EW

Bracket for Transportation x 2

Screw with washer
(M5 x 8 mm) x 4
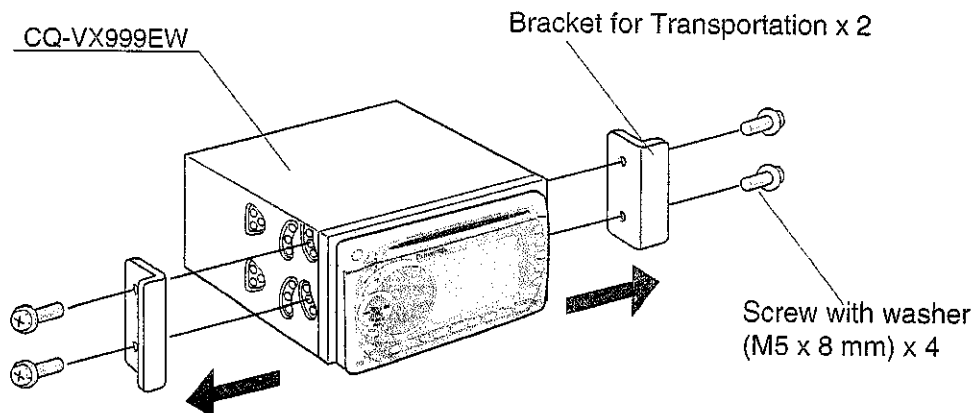
> **Note :**
> ● The unit is not TAP finished on the right side although there are screw holes in it. Please only use screws provided to mount the unit.
> ● To tighten the screws, press its head down straight forward.

■ Installation Hardware

Item	Qty
Screw with washer (M5 × 8mm)	4
Flat-head small screw (M5 × 8mm)	8
Power Connector	1
Remote Control	1
Lithium Battery (CR2032)	1

46

CQ-VX999EW

Electrical Connection

Before Wiring Connection

> **Note :**
> For installation in cars with trip or navigational computers, all electronic memory settings previously registered in the computer will be lost when the battery terminal is disconnected. Do not disconnect the battery in vehicles equipped with these units. Therefore, extra care should be taken to prevent short-circuits.

- This unit can be connected to an optional CD changer (CX-DP801EN). For details, consult your nearest Panasonic dealers.
- For connection to a CD changer, refer to the operating instructions of the CD Changer (CX-DP801EN).

> **Caution :**
> - To prevent damage to the unit, be sure to follow the connection diagram as follows.
> - Remove the covering of the leads about 5 mm long from their end before connecting.
> - Do not insert the power connector into the unit until the wiring is completed.
> - Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.

CQ-VX999EW (Rear view)

Radio Antenna Jack
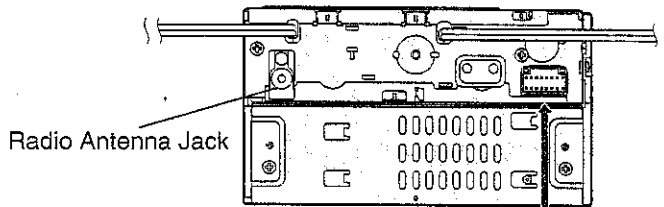
Power Connector

Wiring Accessories

Accessory	Quantity
Power Connector	1

Connect the illumination cord to the power line which is connected to the clearance lights of the car.

(ILLUMINATION)
Illumination Cord
(Orange w/white stripes)

Connect NAVI cord to Panasonic navigation NAVI mute cord.

(NAVI MUTE)
NAVI Mute Cord
(Orange)

to-antenna Control Power Cord (ANT-CONT MAX0.1A)
onnect it to the auto-antenna
itrol power cord of the car.)
(Blue)

(Black)

GROUND
(Connect to a metallic part of the car.)

(ACC 3A)
(Red) Fuse (3A)
Accessories Power Cord
(Connect it to the ACC power connector of the car.)

Caution:
Do not connect the auto-antenna control power cord directly to the power terminal for driving the auto-antenna. (Otherwise, it may cause trouble.)

Connect the battery power cord to a terminal which is always live.

(BATTERY 10A)
(Yellow) Fuse (10A)
Battery Lead
(Connect to car battery)

Twin CD Changer (TWIN CD • C-CONT)
Control Cord
(Do not use) (Brown w/white stripes)

(AMP-CONT MAX 0.1A)
(Blue w/white stripes)
External Amplifier Control Power Cord (Connect it to an external amplifier.)

(White w/black stripes)
(FRONT L)   (FRONT R)   (REAR L)   (REAR R)
(Gray)   (Green w/black stripes)
(Gray w/black stripes)   (Violet) (Violet w/black stripes)
(White)   (Green)
(+) (−)   (+) (−)   (+) (−)   (+) (−)

Front Speaker (left)   Front Speaker (right)   Rear Speaker (left)   Rear Speaker (right)

Electrical Connection (Continued)

Example of System Grade-up (CD/MD Changer and Eight Speakers)

● This set can be used connected to an optional CD/MD changer, for example, Model CX-DP801EN.

With eight speakers

CX-DP801EN (Side view)

Extension Cord
(DIN/RCA/BATT/GND)

CD/MD Changer Input Cord

Red (R)   Red (R)

White (L)   White (L)

(CD/MD · C-IN)

(Yellow)   Fuse (3A)   Battery Cord
(Connect the cord to a terminal which is always supplied with the power.)

(AUX2-IN)   Red (R)   Red (R)

       (RCA)

White (L)   White (L)   General TV etc.

AUX2 Input Cord

CD Changer Connector

Radio Antenna Jack

CQ-VX999EW (Rear view)

Power Connector

Caution:
Do not connect the auto-antenna control power cord directly to the power terminal for driving the auto-antenna. (Otherwise, it may cause trouble.)

Connect the illumination cord to the power line which is connected to the clearance lights of the car.

(ILLUMINATION)   Illumination Cord

(Orange w/white stripes)

Connect NAVI cord to Panasonic navigation NAVI mute cord.

(ANT-CONT MAX0.1A)

(NAVI MUTE)   NAVI Mute Cord

Auto-antenna Control Power Cord (Blue)
(Connect it to the auto antenna control power cord of the car.)

(Orange)

(Black)

GROUND
(Connect to a metallic part of the cart.)

(ACC 3A)   Accessories Power Cord
(Connect it to the ACC power connector of the car.)

(Red)   Fuse (3A)

Preamplifier Output Cord (Rear)

Preamplifier Output Cord
(Sub-woofer/front/rear)
(Connect it to an external amplifier.)

(REAR)

(PRE-OUT)

Connect the battery power cord to a terminal which is always live.

(Yellow)   (BATTERY 10A)

Battery Lead
(Connect it to the car battery.)

Twin CD Changer Control Cord
(Do not use)   (TWIN CD · C-CONT)

Fuse (10A)

White(L) Red(R) White(L) Red(R)

(Brown w/white stripes)
(Do not use.)

(AMP-CONT MAX 0.1A)   External Amplifier Control Power Cord (Connect it to an external amplifier.)

(Blue w/white stripes)

(White w/black stripes)

(FRONT L)   (FRONT R)   (REAR L)   (REAR R)

(Green w/black stripes)

Cord for system grade-up

Cord for system grade-up

(White)   (Gray)   (Green)   (Violet)   (Violet w/black stripes)

(Gray w/black stripes)

(+) (−)   (+) (−)   (+) (−)   (+) (−)

Stereo Power Amplifier   Stereo Power Amplifier

For system grade-up   For system grade-up or sub-woofer speaker

Front Speaker (left)   Front Speaker (right)   Rear Speaker (left)   Rear Speaker (right)

CQ-VX999EW

<Rear Connectors>

- These connectors are used for system grade-up by connecting optional audiovisual appliances for car.
- Refer to the example of system grade-up shown on page 48 for connecting instructions.

CQ-VX999EW (Rear view)

① Radio Antenna Jack

① Radio Antenna Jack

Used for connecting car radio antenna

② Preamplifier Output
(Sub-woofer/front/rear)

Used for upgrading the system

③ Preamplifier Output (Rear)

Used for upgrading the system

④ AUX2 Input Cord

Used to connect this set for other audio appliances

⑤ CD/MD Changer Input Cord

Input terminal for audio from CD/MD changer

Troubleshooting

Maintenance

Your product is designed and manufactured to ensure a minimum of maintenance. To clean the exterior of this unit, use soft cloth to wipe the surface. Do not use benzine, thinner, or any other type of solvent.

Product Servicing

● This unit should only be serviced by qualified technicians. Service information is not provided for customers.

● Should your unit ever require service, refer to the enclosed Panasonic Factory Service center or consult your nearest authorized Panasonic Service Center for detailed instructions.

Replacing the Fuse

Be sure to use a fuse of the specified rating (3A, 10A) when replacing a blown fuse. Fuses with higher capacity ratings, use of any substitute, or connection without a fuse may result in a fire hazard or damage to the unit.

If the replaced fuse fails, contact your nearest authorized Panasonic Service Center.

■ Error Indication

Tape

Display	Description
	Tape cannot be ejected in this state. Press OPEN/CLOSE button.

CD

Display	Description
	CD cannot be ejected in this state. Close the front panel, then press ▲.

CD Changer

Display	Description
	CD is dirty or the wrong side up. The changer automatically selects the next disc.
	CD has a flaw or flaws.
	The set is not operating due to some cause. Press the reset button on the changer.
	No disc is inside the CD/MD changer, or no magazine is in it.

Note:
The numerals before error symbols E1 and E2 are disc numbers.

CQ-VX999EW

Special Notes

Notes on Compact Discs

ONLY USE DISCS CARRYING LABEL SHOWN ON THE RIGHT

COMPACT
disc
DIGITAL AUDIO

- Dirt, dust, scratches and bending of disc will cause malfunction. Handle discs with care.
- Do not place stickers or make scratches on disc.
- Do not bend discs.
- Disc should always be kept in the case when not in use to prevent from damaging.
- Do not place discs in the following places:
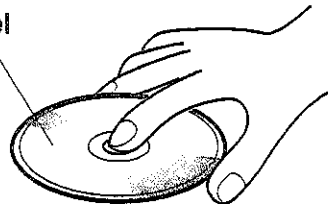 1. Direct sunlight;
  2. Dirty, dusty and damp areas;
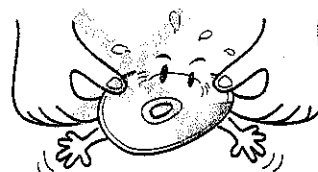 3. Near car heaters;
  4. Seats and dashboard.

Disc Cleaning
Use dry soft cloth to wipe the surface. If the disc is quite dirty use soft cloth slightly dampened in iso-propyl (rubbing) alcohol. Never use solvents such as benzine, thinner, conventional record cleaner, or mopper as they may mar the surface of the disc.

Label

Do not touch the underside of the disc.

Do not bend.

Wipe the disc from center to outside direction.

Caution for Use of a New Disc

A new disc may have rough edges on its inner and outer perimeter. If a disc with rough edges is used, proper setting will not be possible and the CD player will not play the disc. Therefore, remove the rough edges in advance by using a ball-point pen or pencil as shown on right. To remove the rough edges, press the side of the pen or pencil against the inner and outer perimeter of the disc.

Rough edges on outer perimeter
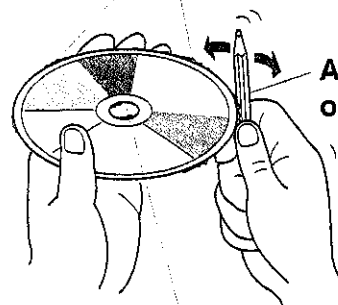
A ball-point pen or pencil

Rough edges on inner perimeter

CQ-VX999EW

Special Notes (Continued)

Notes on Cassette Tapes

Tape Slack:
Use a pencil or similar object to take up the slack as shown. If a loose tape is used, this may result in the tape becoming tangled in the rotating parts of the unit.

Pencil

Label

Exposed end
(Open end)

Do not touch or pull out the tape.

Battery Replacement:

1. **Remove the battery case.**
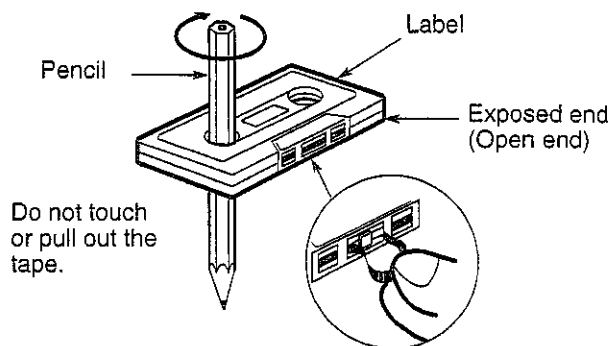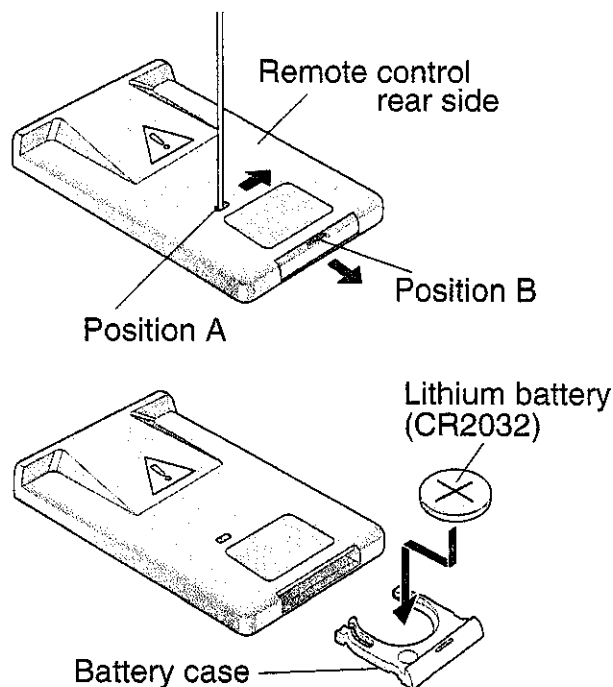   Pull the case by the Position B after pushing Position A with inserting a pin into the slot in the directions indicated by the each arrow.
2. **Replace the battery.**
   Set a new battery properly with (+) side up as illustrated.
3. **Insert the battery holder.**
   Push in the holder to the original position.

Remote control rear side

Position B

Position A

Lithium battery (CR2032)

Battery case

Note on Batteries:

Old batteries must immediately be removed and disposed.
Battery Information:
● Designated Battery: Panasonic Lithium Battery (CR2032)
● Battery Life: 6 months with normal use (in normal room temperature)

Caution:
Improper use of batteries may cause overheating, explosion or ignition, resulting in injury or fire.
Battery leakage may cause damage to the unit.

● Do not disassemble or short the batteries. Do not throw the batteries into the fire.
● To avoid the risk of accident, keep the batteries out of reach of children.

CQ-VX999EW

Specifications

GENERAL

Power Supply	: 12 V DC (11 V - 16 V) ; test Voltage, 14.4 V; negative ground
Current Consumption	: 8.5 A (at rated tape operation output)
Rated output	: 16 W x 4 channels (1,000Hz, 1%, 4Ω)
Maximum output	: 40 W x 4 channels
Suitable speaker impedance	: 4Ω
Audio input impedance	: 10kΩ
Audio input sensitivity	: 600mV
PRE-OUT output valtage	: 600mV
PRE-OUT output impedance	: 600Ω
External dimensions	: 178 (W) x 100 (H) x 160 (D) mm
Weight	: 2.9kg

Tuners
FM Tuners

Frequency range	: 87.5 to 108.0 MHz
Useable sensitivity	: 12 dBf
Total harmonic distortion (mono)	: 0.3% (1kHz)
Weighted S/N ratio (mono)	: 70dB
Frequency response	: 20 to 15,000 Hz ±3 dB
Stereo separation	: 42dB (1kHz)
Image-rejection ratio	: 75 dB

AM Tuners

Frequency Range	: 531 to 1,602 kHz
Useable Sensitivity (S/N 20dB)	: 27 dB/μV
Image-jamming ratio	: 65 dB

Cassette Tape Player

Reproduction system	: 4-track, 2-program stereo
Tape speed	: 4.76 cm/sec
Fast forward time	: 100 sec (C-60)
Rewind time	: 100 sec (C-60)
Frequency response	: 30 to 18,000 Hz (normal tape)
	30 to 20,000 Hz (metal tape)
Wow and flutter	: 0.07% (WRMS)
Signal/Noise ratio	: Dolby NR OFF 56 dB (IHF, A)
	Dolby NR ON 66 dB (IHF, A)

CD Player

Number of channel	: 2 channels
Quantization	: 16-bit linear
Frequency response	: 5 to 20,000 Hz
Dynamic range	: 90dB (1kHz)
Wow and flutter	: Below measurable limits

CQ-VX999EW

DSP

Number of channel : 2 channels for Input; 4 channels for output
DSP patterns : 7 patterns
Equalizer center frequency : 80, 160, 320, 640, 1.6k, 4k, 10k (Hz)
Equalizer range : −12 dB to +12 dB (13 step)

Note:
Specifications and design are subject to modification without notice due to improvements in technology.

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54